SONY

4-147-228-**12**(1)

The software of this system may be updated in the future. To find out details on any available updates, please visit: http://esupport.sony.com

BD/DVD Home Theatre System

Operating Instructions

BDV-T20W / E500W

* 4 1 4 7 2 2 8 1 2 * (1)

Sony Corporation Printed in Malaysia

http://www.sony.net/

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WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc. Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

Excessive sound pressure from earphones and headphones can cause hearing loss.

Indoor use only.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this BD/DVD Home Theatre System is harmful to eyes, do not attempt to disassemble the cabinet.

Refer servicing to qualified personnel only.



This label is located on the laser protective housing inside the enclosure.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

About the surround amplifier

- The nameplate is located on the side exterior.
- For the customers in the U.S.A.: Date of Manufacture Marking is located on the bottom exterior.

Precautions

On power sources

- The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.
- As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

For the customers in the U.S.A.





This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Owner’s Record

The model and serial numbers are located at the rear exterior of the control unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. BDV-T20W/BDV-E500W

Serial No._____

The following FCC statement applies only to the version of this model manufactured for sale in the USA. Other versions may not comply with FCC technical regulations.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a

particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna (aerial).
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



ENERGY STAR® is a U.S. registered mark.
As an ENERGY STAR® partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

For the wireless transceiver (EZW-RT10/EZW-RT10A)

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65.
This equipment should be installed and operated with at least 20cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

Notice for the customers in Canada

For the wireless transceiver (EZW-RT10/EZW-RT10A)

This Class B digital apparatus complies with Canadian ICES-003.

This device complies with RSS-Gen of IC Rules.
Operation is subject to the following two conditions:
(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with IC radiation exposure limits set forth for uncontrolled equipment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

This equipment should be installed and operated with at least 20cm and more between the radiator and persons body (excluding extremities: hands, wrists, feet and ankles).

Copyrights and Trademarks

- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights.
 Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision.
 Reverse engineering or disassembly is prohibited.
- This system incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.
 * Manufactured under license from Dolby Laboratories.
 "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.
 ** Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535; 7,392,195; 7,272,567; 7,333,929; 7,212,872 & other U.S. and worldwide patents issued & pending.
 DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio | Essential are trademarks of DTS, Inc.
 © 1996-2008 DTS, Inc. All Rights Reserved.
- This system incorporates High-Definition Multimedia Interface (HDMI™) technology. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
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- Other system and product names are generally trademarks or registered trademarks of the manufacturers. ™ and ® marks are not indicated in this document.

About These Operating Instructions

- The instructions in these Operating Instructions describe the controls on the remote. You can also use the controls on the unit if they have the same or similar names as those on the remote.
- Icons, such as BD, listed at the top of each explanation indicate what kind of disc can be used with the function being explained. For details, see "Playable Discs" (page 101).
- In this manual, "disc" is used as a general reference for the BDs, DVDs, or CDs unless otherwise specified by the text or illustrations.
- The instructions in this manual are for BDV-T20W and BDV-E500W. BDV-T20W is the model used for illustration purposes. Any difference in operation is clearly indicated in the text, for example, "BDV-T20W."
- The Control Menu items may vary depending on the area.
- The default setting is underlined.

About the S-AIR function

The system is compatible with the S-AIR function, which allows transmission of sound between S-AIR products wirelessly.
The following S-AIR products can be used with the system:

- Surround amplifier (supplied): You can enjoy surround speaker sound wirelessly.
- Surround back amplifier (optional): You can enjoy surround back speaker sound wirelessly.
- S-AIR receiver (optional): You can enjoy system sound in another room.

The S-AIR products can be purchased as options (the S-AIR product lineup differs depending on the area).

Notes or instructions for the surround amplifier, surround back amplifier, or S-AIR receiver in these Operating Instructions refer only to when the surround amplifier, surround back amplifier, or S-AIR receiver is used.
For details on the S-AIR function, see "Using an S-AIR Product" (page 61).

Table of Contents

About These Operating Instructions 5
About the S-AIR function 5
Unpacking 7
Index to Parts and Control 10

Getting Started

Step 1: Installing the System 16
Step 2: Connecting the System ... 22
Step 3: Setting up the Wireless System 32
Step 4: Performing the Easy Setup 34
Step 5: Selecting the Source 37
Step 6: Enjoying Surround Sound 38

Playback

Playing a BD/DVD 41
Enjoying BonusView/BD-Live 48
Playing a CD 49
Playing Photo Files 50

Sound Adjustment

Selecting the Effect to Suit the Source 52
Selecting the Audio Format, Multilingual Tracks, or Channel 53
Enjoying Multiplex Broadcast Sound 54
Using the Sound Effect 54

Tuner

Listening to the Radio 56

External Audio Device

Using the DIGITAL MEDIA PORT Adapter 60
Using an S-AIR Product 61

Other Operations

Using the Control for HDMI Function for "BRAVIA" Sync 67
Calibrating the Appropriate Settings Automatically 70
Setting the Speakers 71
Controlling Your TV with the Supplied Remote 73
Using the Sleep Timer 75
Changing the Brightness of the Front Panel Display 75
Deactivating the Buttons on the Unit ... 76
About the demonstration 76
Saving Power in Standby Mode 77

Settings and Adjustments

Using the Setup Display 78
[Network Update] 79
[Video Settings] 80
[Audio Settings] 82
[BD/DVD Viewing Settings] 84
[Photo Settings] 86
[HDMI Settings] 86
[System Settings] 87
[Network Settings] 88
[Easy Setup] 89
[Resetting] 90

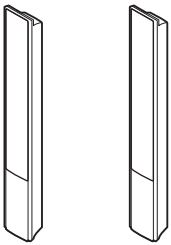
Additional Information

Precautions 91
Notes about the Discs 92
Troubleshooting 93
Self-diagnosis Function 100
Playable Discs 101
Supported Audio Formats 103
Video Output Resolution 104
Specifications 105
Language Code List 108
Terms and Conditions of Use and End User License Agreement 109
Software License Information 111
Glossary 120
Index 123

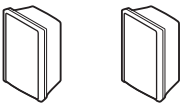
Unpacking

BDV-T20W

- Front speakers (2)



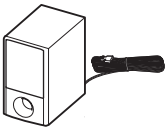
- Surround speakers (2)



- Center speaker (1)



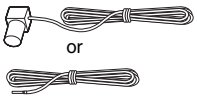
- Subwoofer (1)



- AM loop antenna (aerial) (1)



- FM wire antenna (aerial) (1)



- Speaker cords (5, white/red/blue/gray/green)



- Video cord (1)



- Remote commander (remote) (1)



- R6 (size AA) batteries (2)



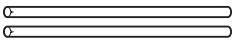
- Calibration mic (1)



- Foot pads (1 set)



- Posts (2)



- Bases (2)



- Mounting plates (2)



- Post covers (2)



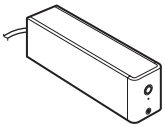
- Screws (large, with washer) (4)



- Screws (small) (6)



- Surround amplifier (1)



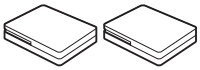
- Speaker cord cover (1)



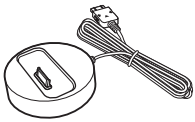
- Speaker cord holder (1)



- Wireless transceivers (2)



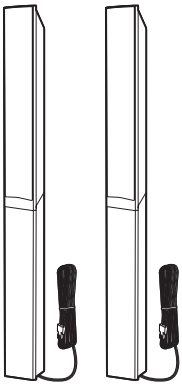
- Operating Instructions
- Speaker Installation Guide
- Quick Setup Guide
- To stabilize S-AIR reception
- Setup Disc (DVD)
- DIGITAL MEDIA PORT adapter (TDM-iP20) (1)



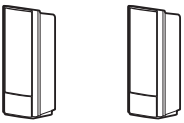
- Operating Instructions for the DIGITAL MEDIA PORT adapter (TDM-iP20)

BDV-E500W

- Front speakers (2)



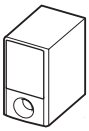
- Surround speakers (2)



- Center speaker (1)



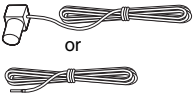
- Subwoofer (1)



- AM loop antenna (aerial) (1)



- FM wire antenna (aerial) (1)



- Speaker cords (4, blue/gray/green/purple)



- Video cord (1)



- Remote commander (remote) (1)



- R6 (size AA) batteries (2)



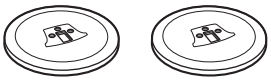
- Calibration mic (1)



- Foot pads (1 set)



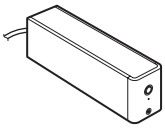
- Bases (2)



- Screws (with washer) (6)



- Surround amplifier (1)



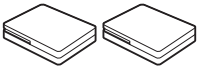
- Speaker cord cover (1)



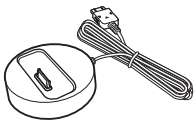
- Speaker cord holder (1)



- Wireless transceivers (2)



- Operating Instructions
- Speaker Installation Guide
- Quick Setup Guide
- To stabilize S-AIR reception
- Setup Disc (DVD)
- DIGITAL MEDIA PORT adapter (TDM-iP20) (1)

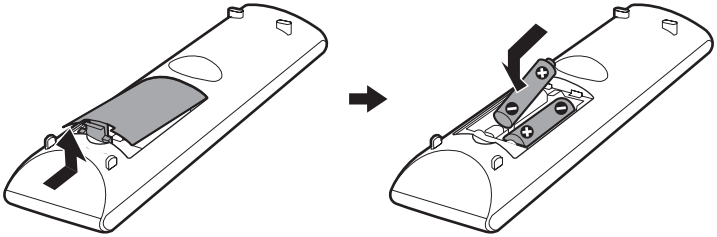


- Operating Instructions for the DIGITAL MEDIA PORT adapter (TDM-iP20)

Using the remote

Inserting batteries into the remote

Insert two R6 (size AA) batteries (supplied) by matching the ⊕ and ⊖ ends on the batteries to the markings inside the compartment.

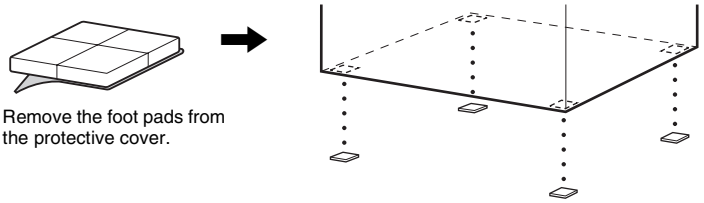


Note

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- If you do not intend to use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Attaching the foot pads to the subwoofer

Attach the foot pads (supplied) to the bottom of the subwoofer to stabilize the subwoofer and prevent it from slipping.

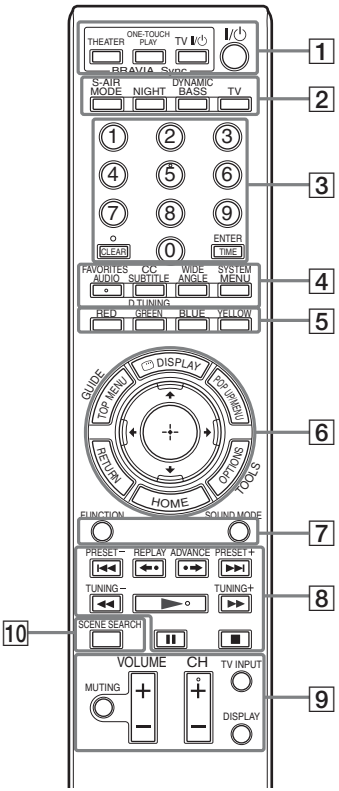


Remove the foot pads from the protective cover.

Index to Parts and Control

For more information, refer to the pages indicated in parentheses.

Remote control



Number 5, FAVORITES/AUDIO, CH +, and ► buttons have a tactile dot. Use the tactile dot as a reference when operating the remote.

- BD : For system operations
- TV : For TV operations
 (For details, see "Controlling Your TV with the Supplied Remote" (page 73).)

1 **THEATER (page 68)** TV
Switches to the optimum video mode for watching movies automatically.

ONE-TOUCH PLAY (pages 41, 68) BD
By only pressing the button, the TV turns on, the TV is set for BD/DVD input selector, and the system starts playing a disc automatically.

TV I/⏻ (on/standby) (page 73) TV
Turns on the TV or sets it to standby mode.

I/⏻ (on/standby) (pages 31, 34, 41, 56) BD
Turns on the system or sets it to standby mode.

2 **S-AIR MODE (page 62)** BD
Selects playback mode for the S-AIR receiver.

NIGHT (page 55) BD
Activates the night mode function.

DYNAMIC BASS (page 54) BD
Reinforces bass frequencies.

TV (page 73) TV
Changes to the TV operation mode for the remote.

3 **Number buttons (pages 41, 57, 73)** BD TV
Enters the title/chapter numbers, radio frequencies, etc.

CLEAR (pages 45, 58) BD
Clears the entry field.

TIME (page 46) BD
Displays the elapsed/remaining playback time in the front panel display.

- **(page 73)** TV

Inputs "." (dot) when inputting numerics.

ENTER (page 73) TV
Enters the selected item.

4 **AUDIO (pages 53, 54)** BD
Selects the audio format/track.

SUBTITLE (page 43) BD
Selects the subtitle language when multi-lingual subtitles are recorded on a BD-ROM/DVD VIDEO.

D.TUNING (page 58) BD
Selects the radio frequencies.

ANGLE (page 43) BD
Switches to other viewing angles when multi-angles are recorded on a BD-ROM/ DVD VIDEO.

SYSTEM MENU (pages 38, 47, 54, 58, 61, 75, 75) BD
Enters the system menu.

FAVORITES (page 73) TV
Displays the favorite channel list.

CC (page 73) TV
Displays closed captioning (when available).

WIDE (page 73) TV
Changes the aspect ratio of the connected TV.

5 **Color buttons (RED/GREEN/BLUE/ YELLOW) (page 88)** BD
Short cut keys for selecting items on some BD's menus (can also be used for BD's Java interactive operations).

6 **TOP MENU (page 44)** BD
Opens or closes the BD's or DVD's Top Menu.

DISPLAY (page 46) BD
Displays the playback information on the TV screen.

POP UP/MENU (page 44) BD
Opens or closes the BD-ROM's Pop-up Menu, or the DVD's menu.

OPTIONS (pages 41, 49, 50, 56) BD
Displays the options menu on the TV screen.

HOME (pages 34, 41, 49, 50, 56, 70, 78) BD TV
Enters or exits the system's home menu.

RETURN (pages 73, 88) BD TV
Returns to the previous display.

←/↑/↓/→ BD TV
Moves the highlight to a displayed item.

(ENTER) BD TV
Enters the selected item.

GUIDE (page 73) TV
Displays the Digital Electronic Programme Guide (EPG).

TOOLS (page 73) TV
Displays the operation menu for the current display.

7 **FUNCTION (pages 37, 41, 49, 50, 56, 60)** BD
Selects the playback source.

SOUND MODE (page 52) BD
Selects the sound mode.

8 **Playback operation buttons** BD
See "Playback" (page 41).

I◄◄ /►►I (previous/next)

←•/•→ REPLAY/ADVANCE

◄◄/►► (fast reverse/fast forward)

► (play)

II (pause)

■ (stop)

Radio operation buttons BD
See "Tuner" (page 56).

PRESET +/–

TUNING +/–

9 **MUTING (pages 41, 49, 73)** BD TV
Turns off the sound temporarily.

VOLUME +/– (pages 41, 73) BD TV
Adjusts the volume.

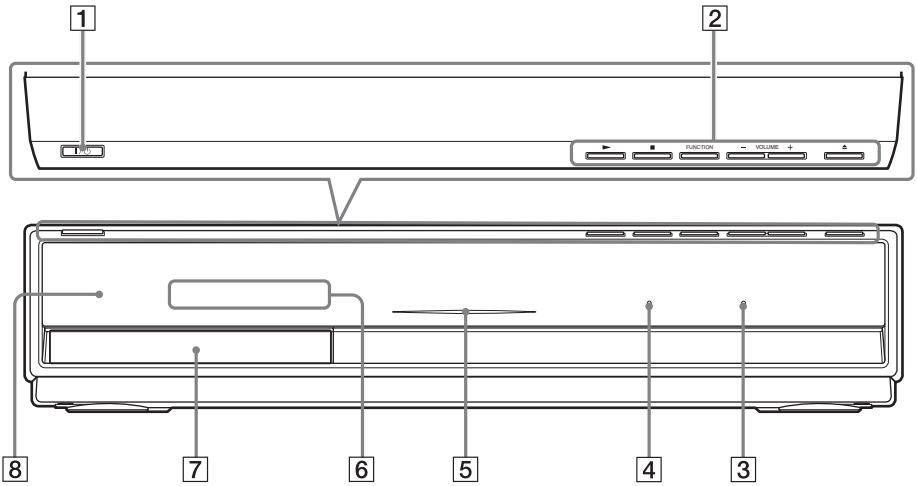
CH +/– (page 73) TV
Selects the channels up and down.

TV INPUT (page 73) TV
Switches the TV's input source between the TV and other input sources.

DISPLAY (page 56) BD
Changes the radio information in the front panel display between radio frequency and station name.

10 **SCENE SEARCH (page 45)** BD
Switches to Scene Search mode that lets you move quickly between scenes within the title currently being played back.

Front panel



1 **I/⏻ (on/standby) (page 41)**

Turns on the unit, or sets to standby mode.

2 **Play operation buttons (page 41)**

► (play)

Starts or re-starts playback.

Plays a slideshow when a disc containing JPEG image files is inserted.

■ (stop)

Stops playback and remembers the stop point (resume point).

The resume point for a title/track is the last point you played or the last photo for a photo folder.

FUNCTION

Selects the playback source.

VOLUME +/–

Adjusts the system's volume.

⏏ (open/close)

Opens or closes the disc tray.

3 **S-AIR indicator**

Lights up when the S-AIR transceiver is inserted in the unit and the system transmits sound.

4 **VIRTUAL 7.1CH indicator (page 38)**

Lights up while virtual 7.1ch decoding is activated.

5 **Power indicator**

Lights up while the system is turned on.

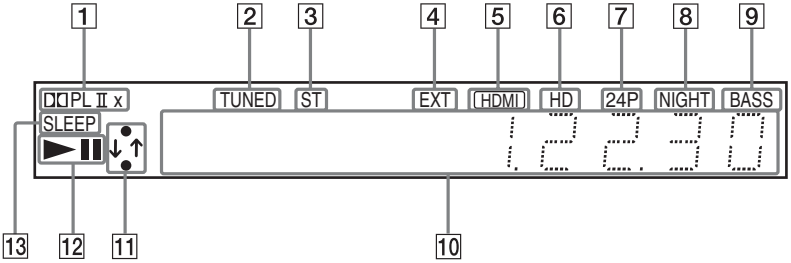
6 **Front panel display**

7 **Disc tray (page 41)**

8 **(remote sensor)**

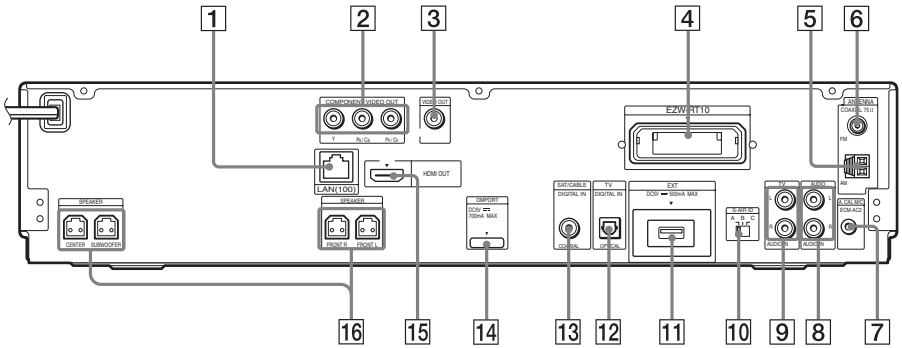
Front panel display

About the indications in the front panel display



1. **Current surround format**
2. **Lights up when a station is received. (Radio only) (page 56)**
3. **Lights up when stereo sound is received. (Radio only) (page 56)**
4. **Lights up when the external memory is recognized. (page 29)**
5. **Lights up when the HDMI OUT jack is correctly connected to an HDCP (High-bandwidth Digital Content Protection)-compliant device with HDMI or DVI (Digital Visual Interface) input.**
6. **Lights up when outputting 720p/1080i/1080p video signals from the HDMI OUT jack or 720p/1080i video signals from the COMPONENT VIDEO OUT jacks.**
7. **Lights up when outputting 1920 × 1080p/24 Hz video signals.**
8. **Lights up when the night mode is on. (page 55)**
9. **Lights up when the DYNAMIC BASS function is on. (page 54)**
10. **Displays system's status such as chapter, title, or track number, time information, radio frequency, playing status, decoding mode, etc.**
11. **Lights up when the system is accessing the network.**
12. **Displays system's playing status.**
13. **Flashes when the sleep timer is set. (page 75)**

Rear panel



1 **LAN (100) terminal (page 30)**

2 **COMPONENT VIDEO OUT jacks (page 24)**

3 **VIDEO OUT jack (page 24)**

4 **EZW-RT10 slot (page 28)**

5 **AM terminal (page 27)**

6 **COAXIAL 75Ω FM jack (page 27)**

7 **A.CAL MIC jack (pages 34, 70)**

8 **AUDIO (AUDIO IN L/R) jacks (page 26)**

9 **TV (AUDIO IN L/R) jacks (page 25)**

10 **S-AIR ID switch (pages 32, 61)**

11 **EXT slot (page 29)**

12 **TV (DIGITAL IN OPTICAL) jack (page 25)**

13 **SAT/CABLE (DIGITAL IN COAXIAL) jack (page 26)**

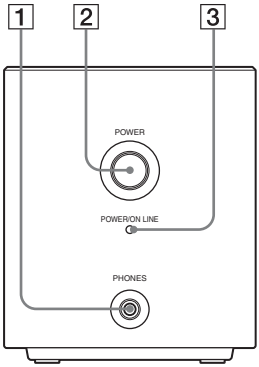
14 **DMPORT (DIGITAL MEDIA PORT) jack (page 26)**

15 **HDMI OUT jack (page 24)**

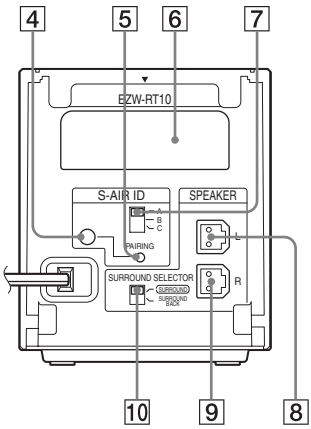
16 **SPEAKER jacks (page 22)**

Surround amplifier

Front panel



Rear panel



1 **PHONES jack (page 32)**

2 **POWER (ON/OFF) (pages 32, 61)**

3 **POWER / ON LINE indicator (pages 32, 61)**

4 **PAIRING indicator (page 64)**

5 **PAIRING (page 64)**

6 **Wireless transceiver (EZW-RT10) slot (page 28)**

7 **S-AIR ID switch (pages 32, 61)**

8 **SPEAKER L jack (page 22)**

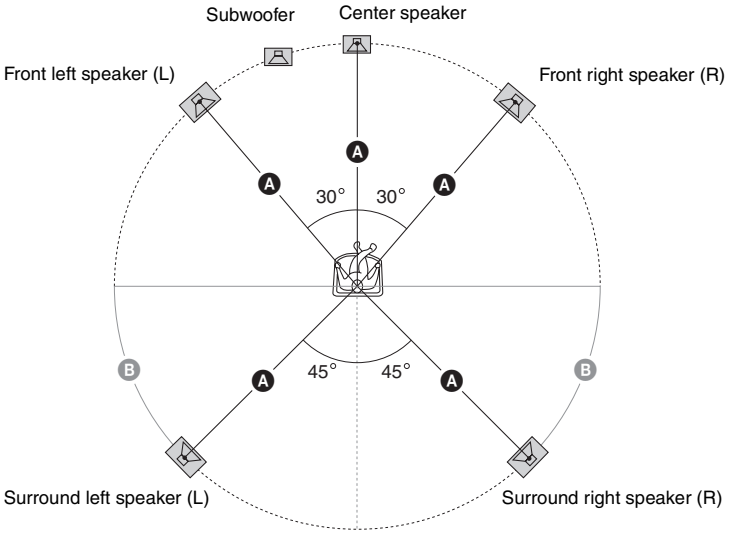
9 **SPEAKER R jack (page 22)**

10 **SURROUND SELECTOR switch (pages 32, 61)**

Step 1: Installing the System

Positioning the speakers

For the best possible surround sound, place all speakers at the same distance from the listening position (A). The distance can be between 0 to 23 feet (0.0 to 7.0 meters).
If you cannot place the center speaker and surround speakers at the same distance as (A), place them within 23 feet (7.0 meters) of the listening position.
Place the surround speakers to the rear of the listening position (B).
The subwoofer can be placed anywhere in the room.



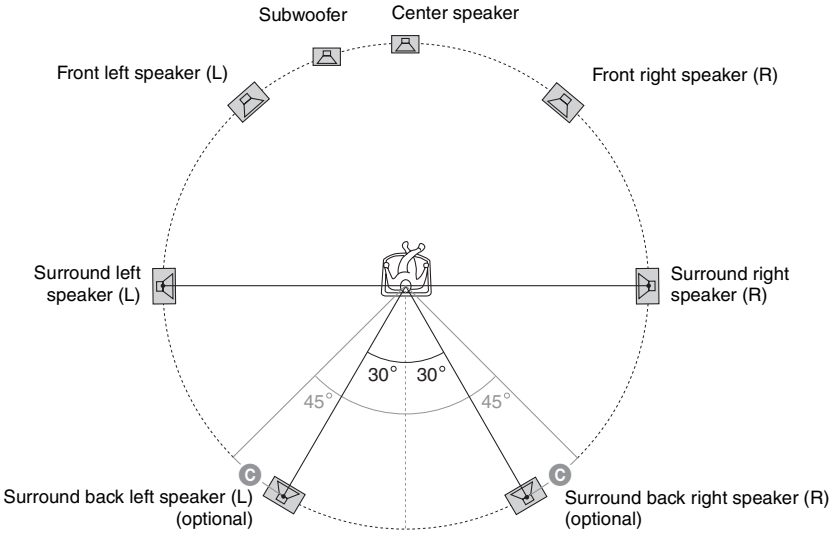
Note

- Use caution when placing the speakers and/or speaker stands attached to the speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.
- Do not lean or hang on a speaker, as it may fall down.

To add the optional surround back speakers

You can enjoy 7.1 surround sound by purchasing the Wireless Surround Speaker Kit (WAHT-SBP1, optional). The optional product lineup differs depending on the area.

For the position of the surround back speakers, refer the illustration below (C).



Installing the speakers on a wall

Caution

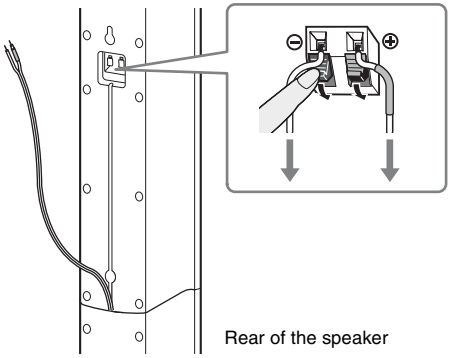
- Contact a screw shop or installer regarding the wall material or screws to be used.
- Use screws that are suitable for the wall material and strength. As a plaster board wall is especially fragile, attach the screws securely to a beam and fasten them to the wall. Install the speakers on a vertical and flat wall where reinforcement is applied.
- Sony is not responsible for accidents or damage caused by improper installation, insufficient wall strength or improper screw installation, natural calamity, etc.

Before installing the front speakers of BDV-E500W on a wall, you need to disassemble the speakers. You can install the upper part of a speaker on a wall.

To disassemble the speaker

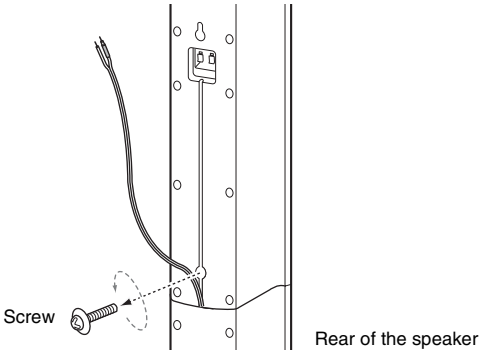
(Front speakers of BDV-E500W only)

1 Disconnect the speaker cords from the speaker.

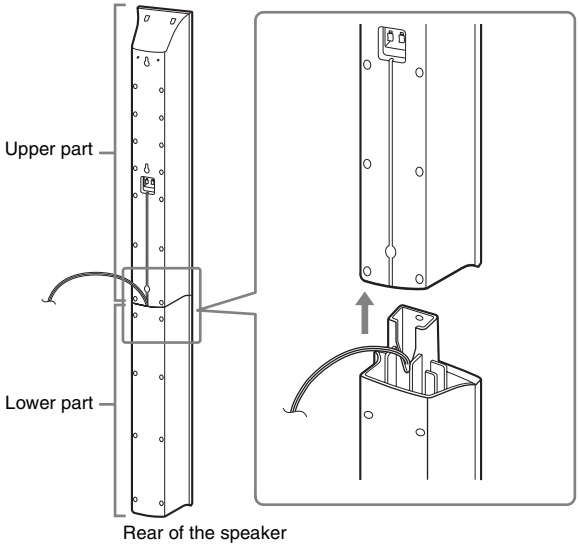


2 Remove the screw (pre-installed) at the rear of the speaker.

This screw is used when reassembling the speaker. Be sure not to lose the screw.

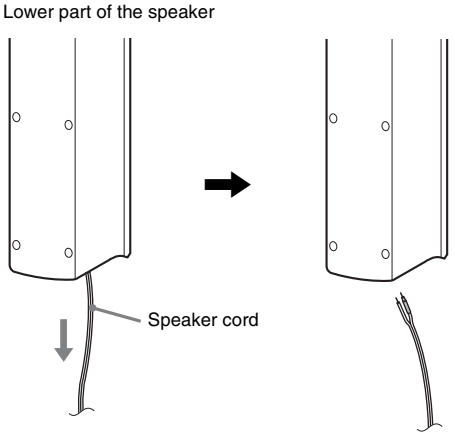


3 **Disassemble the speaker by lifting the upper part of the speaker.**

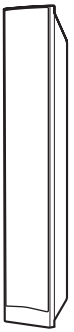


4 **Pull out the speaker cord from the bottom of the lower part of the speaker.**

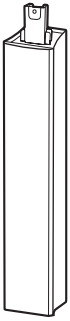
The removed speaker cord is used when installing the speaker on a wall.



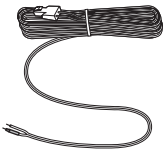
Fully-disassembled illustration



Upper part of the speaker



Lower part of the speaker



Speaker cord



Screw

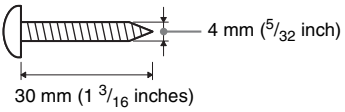
To install the speakers on a wall

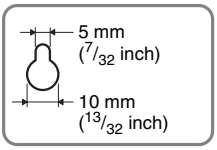
Before installing the speakers on a wall, connect the speaker cord to the speaker.
Be sure to match the speaker cords to the appropriate terminals on the speakers: the speaker cord with the color tube to ⊕, and the speaker cord without the color tube to ⊖.



Color tube
Front left speaker (L): White
Front right speaker (R): Red
Center speaker: Green
Surround left speaker (L): Blue
Surround right speaker (R): Gray

1 Prepare screws (not supplied) that are suitable for the hole on the back of each speaker. See the illustrations below.



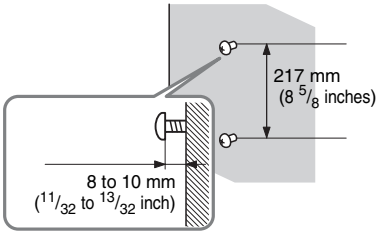


Hole on the back of the speaker

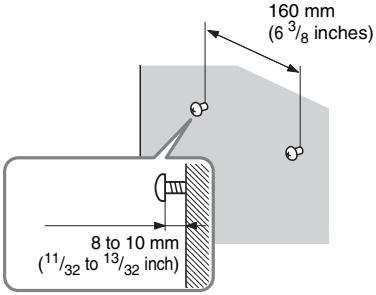
2 **Fasten the screws to the wall.**

BDV-T20W

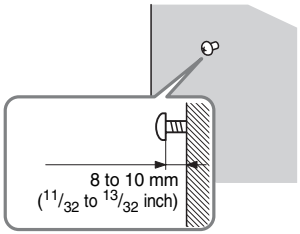
For the front speakers



For the center speaker

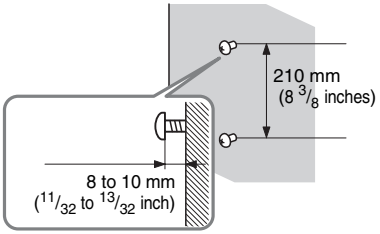


For the surround speakers

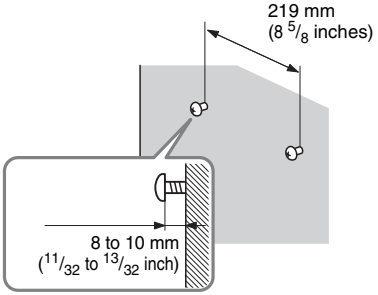


BDV-E500W

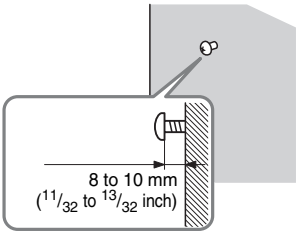
For the front speakers



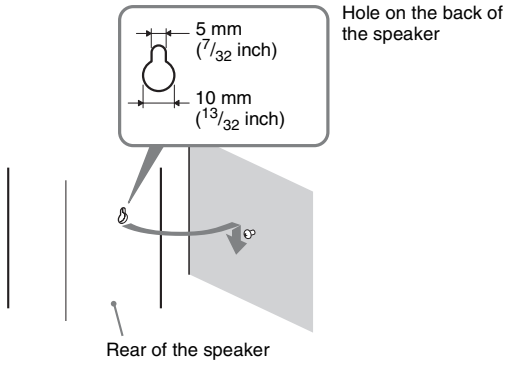
For the center speaker



For the surround speakers



3 **Hang the speakers on the screws.**



Step 2: Connecting the System

For connecting the system, read the information on the following pages.
Do not connect the AC power cord (mains lead) of the unit to a wall outlet (mains) until all the other connections are made.

Note

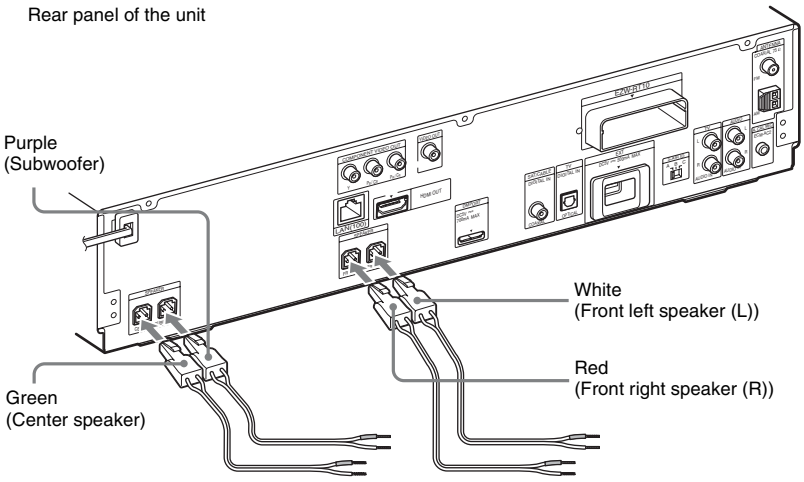
• When you connect another component with a volume control, turn down the volume of the other components to a level where sound is not distorted.

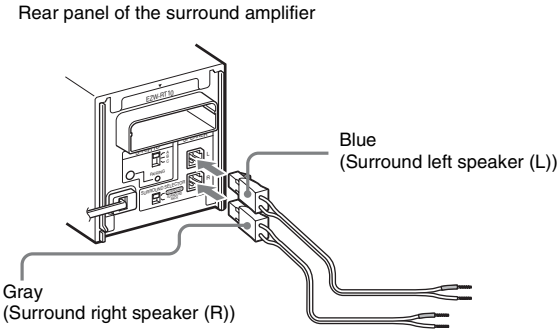
Connecting the speakers

The connector of the speaker cords and the color tube are color-coded depending on the type of speaker. Connect the speaker cords to match the color of the SPEAKER jacks of the unit.
Be sure to match the speaker cords to the appropriate terminals on the speakers: the speaker cord with the color tube to ⊕, and the speaker cord without the color tube to ⊖. Do not catch the speaker cord insulation (rubber covering) in the speaker terminals.

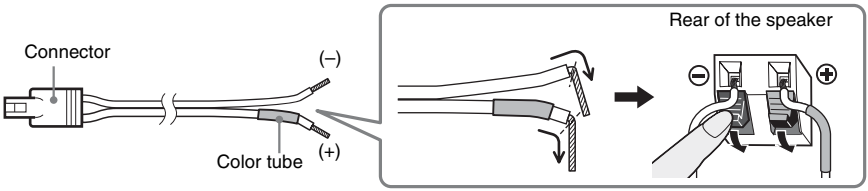
To connect speaker cords to the unit

When connecting to the unit, insert the connector until it clicks.



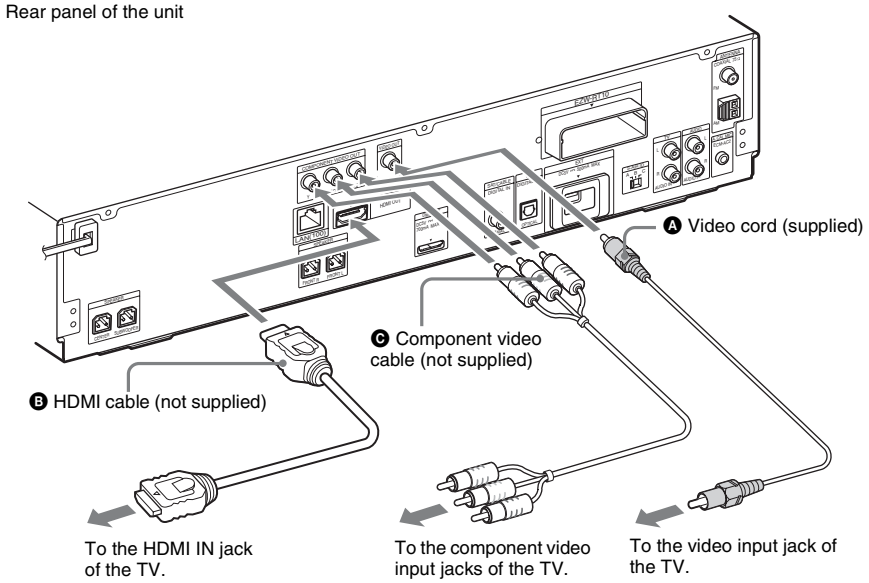


To connect speaker cords to the speaker



Connecting the TV (Video connection)

This connection sends a video signal to the TV.
Depending on the jacks on your TV, select the connection method.



Method 1: Video cord (Ⓐ) connection

This is the basic connection.

Method 2: HDMI* cable (Ⓑ) and video cord (Ⓐ) connection

If your TV has an HDMI jack, connect to the TV both with an HDMI cable and video cord. Picture quality will be improved compared to using only the video cord connection.
When connecting with the HDMI cable, you need to select the type of output signal (pages 34, 81).
To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the HDMI OUT jack.

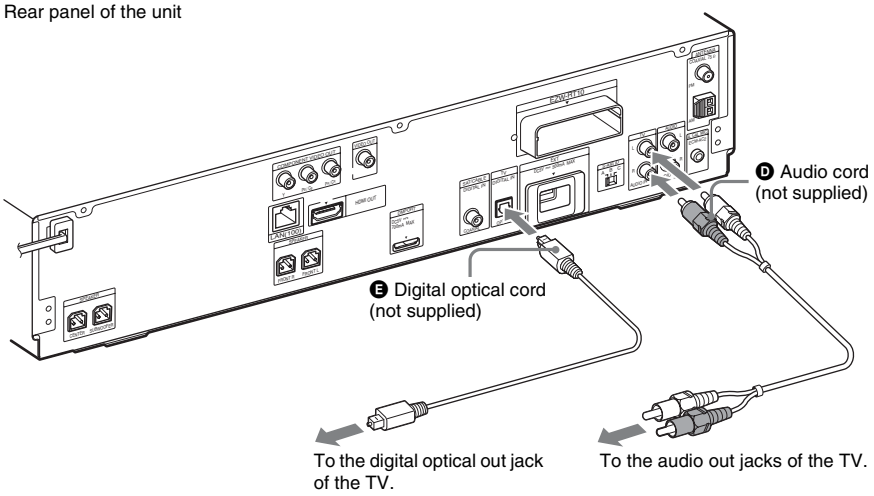
* HDMI (High-Definition Multimedia Interface)

Method 3: Component video cable (Ⓒ) and video cord (Ⓐ) connection

If your TV does not have an HDMI jack, but has component video input jacks, connect to the TV both with a component video cable and video cord. Picture quality will be improved compared to using only the video cord connection.
When connecting with the component video cable, you need to select the type of output signal (pages 34, 81).
To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the COMPONENT VIDEO OUT jack.

Connecting the TV (Audio connection)

This connection sends an audio signal to the unit from the TV. To listen to TV sound via the system, perform this connection.



Method 1: Audio cord (Ⓓ) connection

This is the basic connection and sends an analog audio signal.

Method 2: Digital optical cord (Ⓔ) connection

When the TV has a digital optical output jack, you can improve sound quality by connecting with a digital optical cord in addition to an audio cord connection.
With a digital audio connection, the system receives a Dolby Digital multiplex broadcast signal and you can enjoy multiplex broadcast sound.

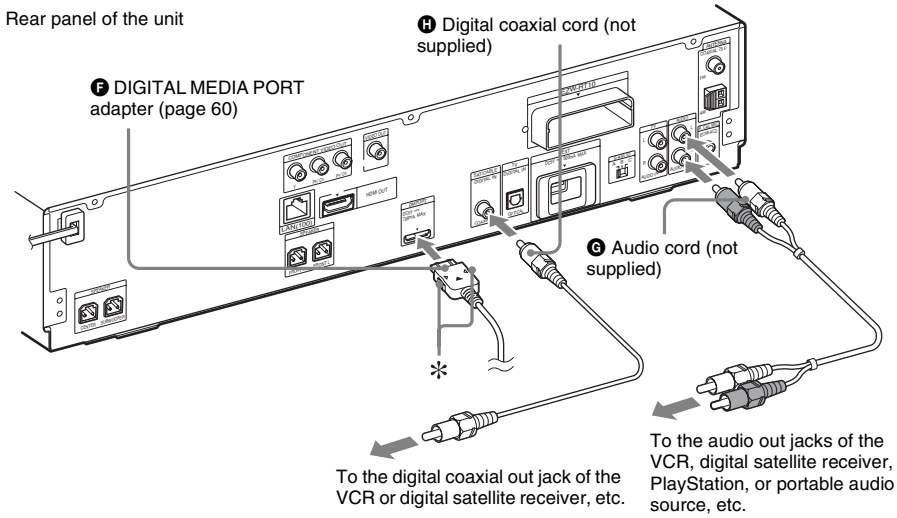
Note

• The system can accept both digital and analog signals. Digital signals have priority over analog signals. If the digital signal ceases, the analog signal will be processed after 2 seconds.

Connecting the other components

You can enjoy connected components via the system's speakers.

- DIGITAL MEDIA PORT adapter: ❶ (TDM-iP20 is supplied. You can also use other DIGITAL MEDIA PORT adapters.)
- VCR, digital satellite receiver, PlayStation, or portable audio source, etc. (not supplied): ❻
- VCR or digital satellite receiver, etc. (not supplied) which has a digital coaxial output jack: ❽

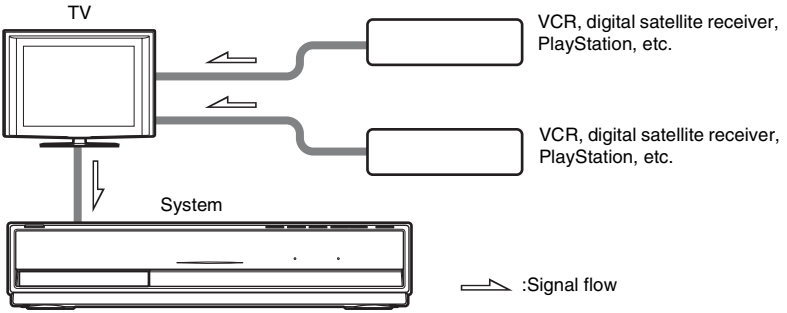


Note

- Connect the DIGITAL MEDIA PORT adapter so that the ▼ marks are aligned. When disconnecting, pull out while pressing ✻.

If your TV has multiple audio/video inputs

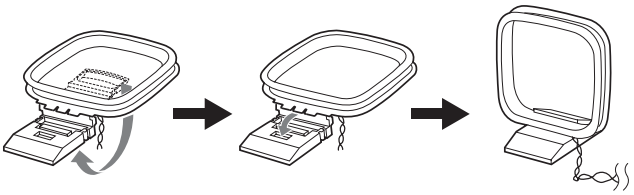
You can enjoy sound with the speakers of the system through the connected TV. Connect the components as follows.



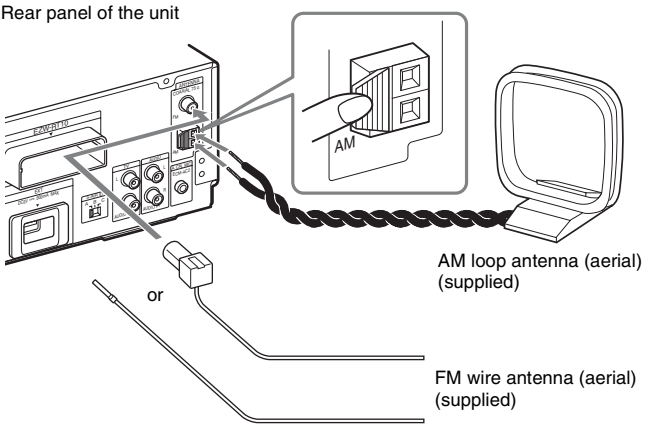
Select the component on the TV. For details, refer to the operating instructions of the TV.
If the TV does not have multiple audio/video inputs, a switcher will be necessary to receive sound from more than one component.

Connecting the antenna (aerial)

To assemble the AM loop antenna (aerial)



To connect the antenna (aerial)

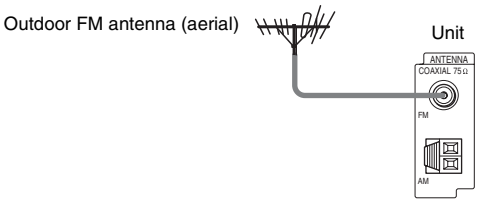


Note

- Keep the AM loop antenna (aerial) and cord away from the system or other AV components, as noise may result.
- Be sure to fully extend the FM wire antenna (aerial).
- After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

Tip

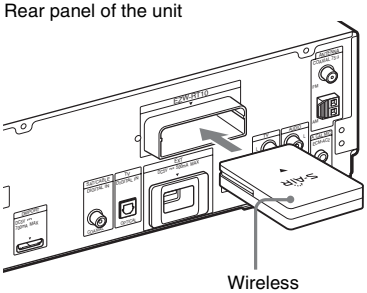
- Adjust the direction of the AM loop antenna (aerial) for best AM broadcast sound.
- If you have poor FM reception, use a 75-ohm coaxial cable (not supplied) to connect the unit to an outdoor FM antenna (aerial) as shown below.



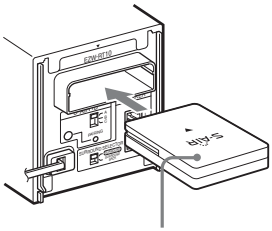
Inserting the wireless transceiver

You can transmit sound from the unit to an S-AIR product, such as the surround amplifier or S-AIR receiver.
To transmit sound from the unit, you need to insert the wireless transceivers into the unit and S-AIR product.
For details of S-AIR products, see “Using an S-AIR Product” (page 61).

Rear panel of the unit

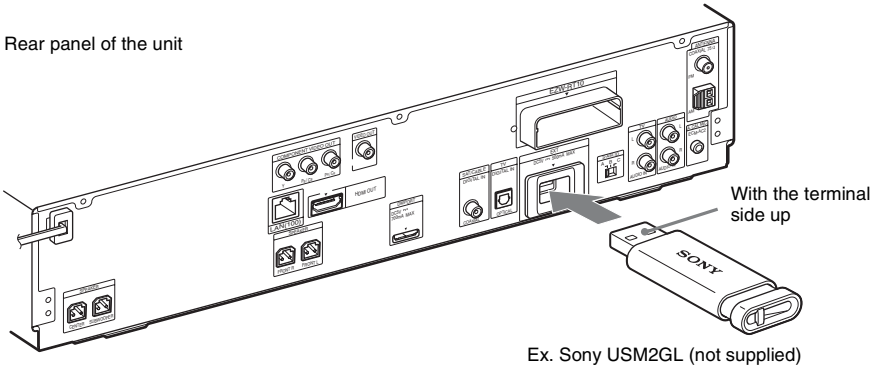


Rear panel of the surround amplifier



Inserting the external memory

Insert the external memory device (1 GB or larger USB flash memory, such as Sony USM2GL, USM4GL, or USM1GH, not supplied) into the EXT slot. Check that "EXT" lights up in the front panel display when turning the system on. By connecting an external memory, you can enjoy additional contents (BonusView/BD-Live) depending on the disc (page 48).



Ex. Sony USM2GL (not supplied)

Note

- Insert the external memory into the EXT slot as far as it will go.
- Insert the external memory straight. If you force the external memory into the slot, this will cause damage to both the external memory and the unit.
- Keep the external memory away from small children to prevent them from accidentally swallowing it.
- Do not apply too much pressure to the external memory in the slot, as it may cause a malfunction.
- To avoid data corruption or damage to the external memory, turn the system off when inserting or removing the external memory.
- Do not insert an external memory that contains photo or music files to avoid corrupting the external memory data.

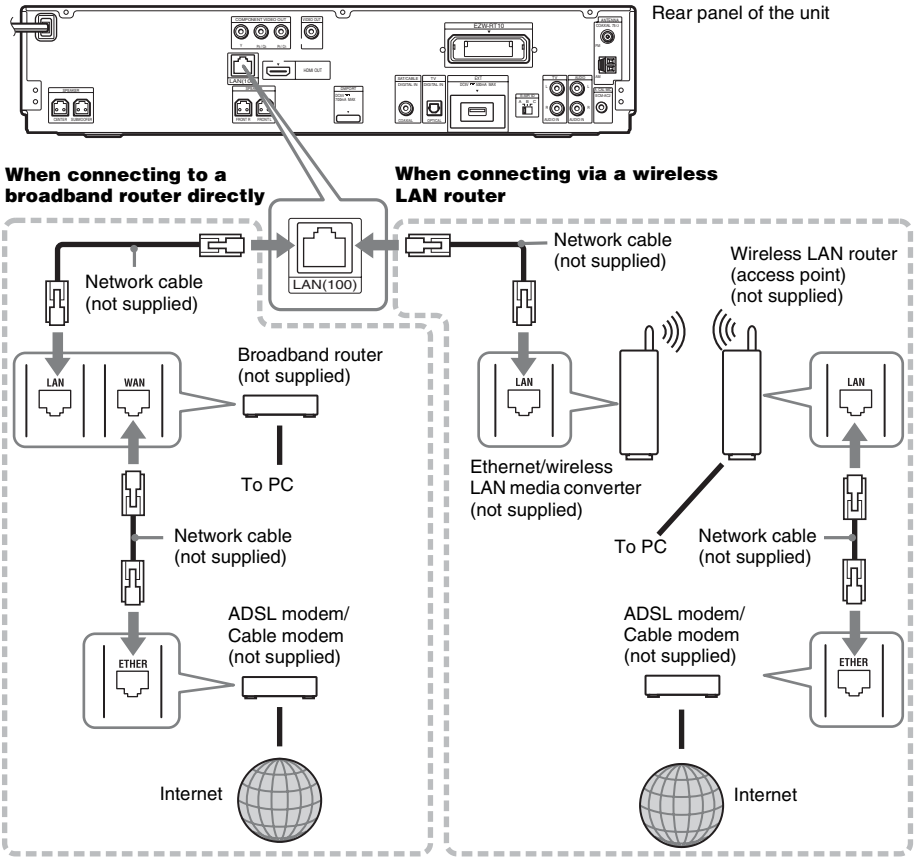
To remove the external memory

1 **Press I/⏻ to turn the system off.**

2 **Pull out the external memory from the EXT slot.**

Connecting to the network

Connect the LAN (100) terminal of the unit to your Internet source using a network cable to update the system's software using the network. You can also enjoy BD-Live (page 48).
Make the appropriate settings in [Internet Settings] under [Network Settings] (page 88).



To update the system's software using the network

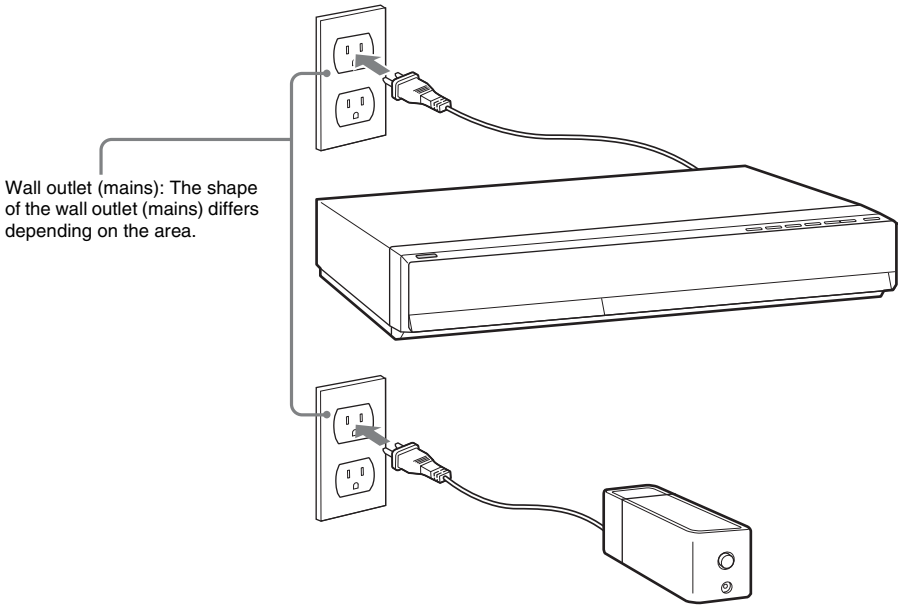
See [Network Update] (page 79) and [Software Update Notification] (page 87).

Note

- Do not connect a phone line to the LAN (100) terminal, as it may cause a malfunction.
- Do not connect the LAN terminal of the unit to the LAN terminal of the PC.
- Depending on the modem or router, the type of network (LAN) cable, straight or crossing, differs. For details on the network (LAN) cables, refer to the operating instructions supplied with the modem or router.
- For optimal performance of BD-Live functions, we recommend using an Internet connection with an effective speed of 1 Mbps or greater.

Connecting the AC power cords (mains leads)

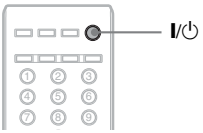
Before connecting the AC power cords (mains leads) of the unit and the surround amplifier to a wall outlet (mains), connect the front, center speakers and subwoofer to the unit and surround speakers to the surround amplifier.



To turn off the demonstration mode (Except for U.S. models)

After connecting the AC power cord (mains lead), the demonstration appears in the front panel display. You can turn off the demonstration simply by pressing I/⏻ on the remote. For details, see “About the demonstration” (page 76).

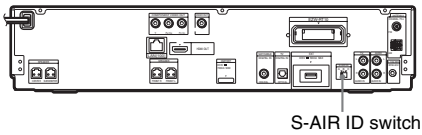
To turn the system on/off (standby mode)

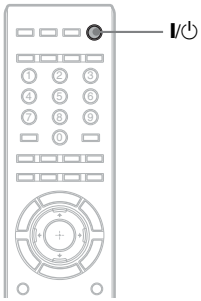


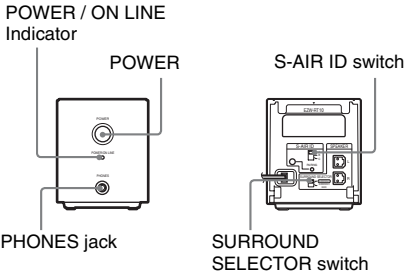
Press I/⏻.

Step 3: Setting up the Wireless System

To use the wireless system, you need to set up the surround amplifier. Before setting, make sure that the wireless transceivers are inserted into the unit and the surround amplifier correctly (page 28).
This wireless system is called “S-AIR.” For details of the S-AIR function, see “Using an S-AIR Product” (page 61).







The unit transmits sound to the surround amplifier that is connected to the surround speakers. To establish sound transmission, perform the following Steps.

1 Set the S-AIR ID switch of the unit to A.

2 Press I/⏻.

The system turns on.

3 Set the SURROUND SELECTOR switch of the surround amplifier to SURROUND.

4 Set the S-AIR ID switch of the surround amplifier to A.

5 Press POWER on the surround amplifier.

The POWER / ON LINE indicator turns green. If it doesn’t, check the transmission status as follows.

To check the transmission status

You can check the status of sound transmission between the unit and surround amplifier by observing the POWER / ON LINE indicator of the surround amplifier.

POWER / ON LINE indicator	Status
Turns green.	Sound transmission is established.
Flashes green.	Sound transmission is not established.
Turns red.	The surround amplifier does not output sound.
Turns off.	The surround amplifier turns off or its protection is active.

For details of the surround amplifier, see “Surround amplifier operation” (page 99).

To enjoy sound by using headphones

You can enjoy the system’s sound by connecting the headphones to the PHONES jack on the surround amplifier.

Note

- The volume of the unit may become minimum if you turn off the surround amplifier while the headphones are connected to the surround amplifier, or radio reception is poor. In this case, “HP NO LINK” and “VOLUME MIN” appear alternately in the front panel display. Check radio reception, and set the volume again.
- When you connect the headphones to the surround amplifier, sound is not output from the system’s speakers.

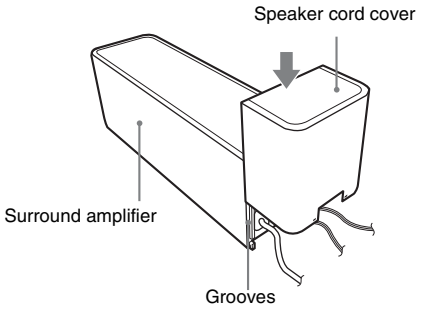
When you use multiple S-AIR products

See “Establishing sound transmission between the unit and S-AIR sub unit (ID setting)” (page 61).

To attach the cover to the surround amplifier

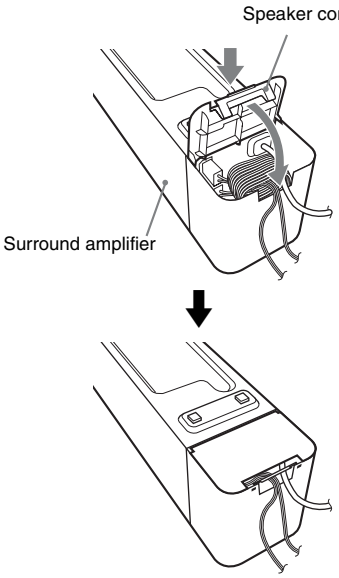
After connecting and setting, you can attach the cover to the surround amplifier for organizing and storing excess speaker cords.

1 **Attach the speaker cord cover by sliding it down along the grooves at the edges of the surround amplifier.**



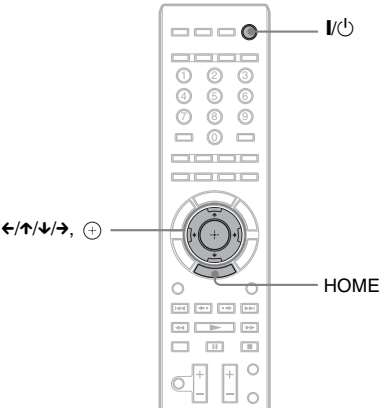
Push the speaker cord cover down until you hear a click. Turn the surround amplifier upside down, then store the cords in the speaker cord cover.

2 **Insert the tabs of the speaker cord holder in the slots of the speaker cord cover, and press it into place.**



Step 4: Performing the Easy Setup

Follow the Steps below to make the basic adjustments for using the system.
Displayed items vary depending on the country model.

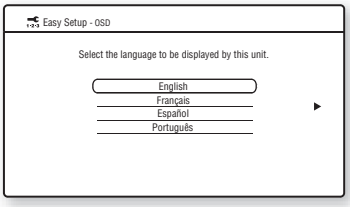


1 **Turn on the TV.**

2 **Press I/⏻ on the unit, and POWER on the surround amplifier.**

3 **Switch the input selector on your TV so that the signal from the system appears on the TV screen.**

The Easy Setup Display for OSD language selection appears.



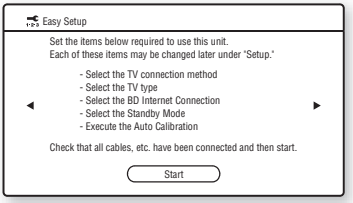
If the Easy Setup Display does not appear

Recall the Easy Setup Display. See "To recall the Easy Setup Display" (page 37).

4 **Press ↑/↓ to select a language for the OSD.**

5 **Press ⊕ or →.**

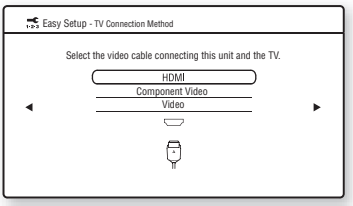
The setting message appears.



This message appears only when performing the [Easy Setup] for the first time. It does not appear when performing the [Easy Setup] accessed via the [Setup] setting.

6 **Press ⊕ or →.**

The Setup Display for video cable selection appears.



7 **Press ↑/↓ to select the cable used to connect the unit and TV.**

Check the connection of the unit and TV (page 24).

- When you connect the unit and TV with an HDMI cable, select [HDMI], go to Step 8 and set the video output resolution to match your TV.
- When you connect the unit and TV with a component video cord, select [Component Video], go to Step 8 and set the video output resolution to match your TV.
- When you connect the unit and TV with the video cord, select [Video] and go to Step 9.

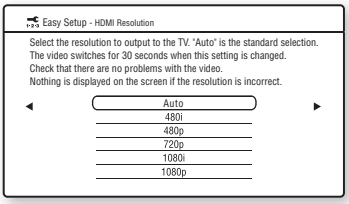
Note

- When you do not connect the unit and TV with an HDMI cable, you cannot select [HDMI].
- When connecting the HDMI OUT jack and other video output jacks at the same time, select [Component Video].
- For details about video output resolution, see "Video Output Resolution" (page 104).

8 Press ⊕ or →.

The Setup Display for video output resolution selection appears. For details, see [Output Video Format] (page 81).

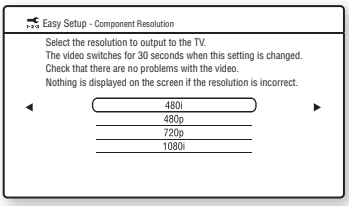
When you select [HDMI] in Step 7



Select from [Auto], [480i], [480p], [720p], [1080i], or [1080p].

When connecting the HDMI OUT jack and other video output jacks at the same time, video signals may only output from the HDMI OUT jack when [Auto] or [1080p] is selected.

When you select [Component Video] in Step 7



Select from [480i], [480p], [720p], or [1080i].

When you change the video output resolution

A picture is displayed in the selected resolution for about 30 seconds, then the display asks for confirmation.

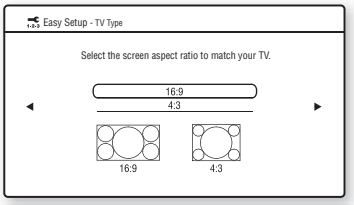
Follow the on-screen instructions and go to the next step.

Note

- If the picture is distorted or no picture appears, wait for about 30 seconds without pressing any buttons. [Is this resolution OK?] appears. Select [Cancel]. The display returns to the resolution setting screen.
- If the selected video output resolution is incorrect, no picture appears on the screen. In this case, press and hold ► and ⏏ on the unit for more than 5 seconds to reset the video output resolution to the lowest resolution. To change the video output resolution, set [Output Video Format] in [Video Settings] (page 81).

9 Press ⊕ or →.

The Setup Display for selecting the aspect ratio of the TV to be connected appears.



10 Press ↑/↓ to select the setting that matches your TV type.

- [16:9]: If you have a wide-screen TV or a 4:3 standard TV with a wide-screen mode. (page 80)
- [4:3]: If you have a 4:3 standard TV. (page 80)

11 Press ⊕ or →.

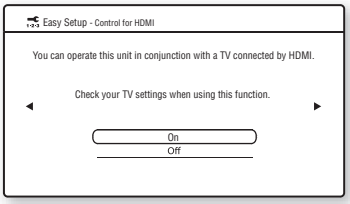
When you connect the unit and TV with an HDMI cable

The Setup Display for the [Control for HDMI] function appears. Go to Step 12.

When you do not connect the unit and TV with an HDMI cable

The Setup Display for [BD Internet Connection] appears. Go to Step 14.

12 Press ↑/↓ to select the setting for the Control for HDMI function.



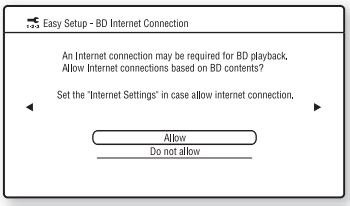
Select [On] to use the [Control for HDMI] function (page 67) when connecting Sony components that are compatible with the Control for HDMI function.

If you do not use the [Control for HDMI] function, select [Off].

13 Press ⊕ or →.

The Setup Display for [BD Internet Connection] appears.

14 Press ↑/↓ to select the setting for the BD Internet connections.

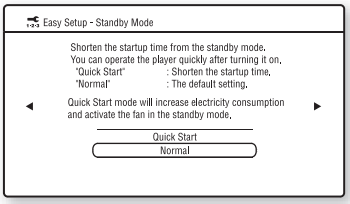


Select [Allow] to allow Internet connections.

If you do not allow the connections, select [Do not allow].

15 Press ⊕ or →.

The Setup Display for [Standby Mode] appears.



16 Press ↑/↓ to select the standby mode.

You can operate the player quickly after turning on this function.

Select [Quick Start] if you want to shorten the startup time from the standby mode. The default setting is [Normal].

Note

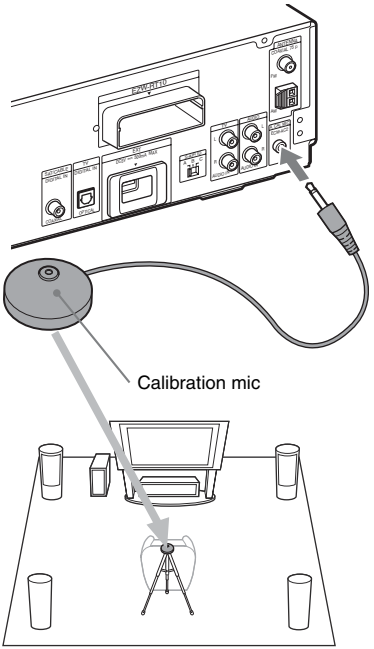
- Quick Start mode will increase electricity consumption in the standby mode.

17 Press ⊕ or →.

The Setup Display for [Auto Calibration] appears.

18 Connect the calibration mic to the A.CAL MIC jack on the rear panel.

Set up the calibration mic at ear level using a tripod, etc. (not supplied). The front of each speaker should face the calibration mic, and there should be no obstruction between the speakers and the calibration mic.



19 Press ↑/↓ to select [Start].

To cancel, select [Cancel].

20 **Press ⊕.**

[Auto Calibration] starts.

The system adjusts the speaker setting automatically.

Be quiet during the measurement.

Note

- Loud test sound is output when [Auto Calibration] starts. You cannot turn the volume down. Give consideration to children and neighbors.
- Before [Auto Calibration], install the surround amplifier in the appropriate location. If you install the surround amplifier in an improper location, such as another room, proper measurement will not be obtained.
- When you use the Wireless Surround Speaker Kit (WAHT-SBP1, optional) for the surround back speakers (page 17), install the speakers in appropriate location and turn the surround amplifier on.

21 **Confirm the conclusions of [Auto Calibration].**

The conclusions appear on the TV screen. Press ←/→ to change the page. The first page shows the distance of speakers. The second page shows the level of speakers. If the conclusions are OK, unplug the calibration mic and press ↑/↓ to select [OK].

Note

- The environment of the room in which the system is installed may affect measurements.

Tip

- You can change a measurement unit (feet or meters) by pressing the color button (RED).

22 **Press ⊕.**

Easy Setup is finished. All connections and setup operations are complete.

To quit the Easy Setup

Press HOME in any Step.

To recall the Easy Setup Display

1 **Press HOME.**

The home menu appears on the TV screen.

2 **Press ←/→ to select [Setup].**

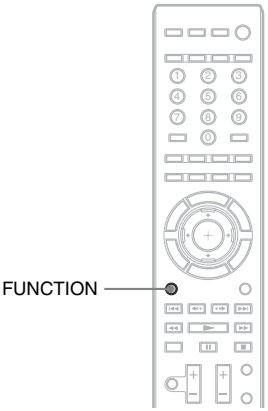
3 **Press ↑/↓ to select [Easy Setup], then press ⊕.**

4 **Press ←/→ to select [Start], then press ⊕.**

The Easy Setup display appears.

Step 5: Selecting the Source

You can select the playback source.



Press FUNCTION repeatedly until the desired function appears in the front panel display.

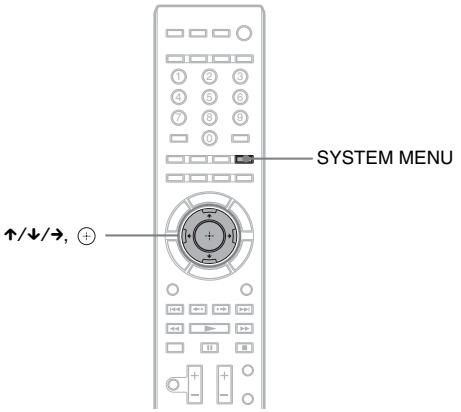
Each time you press FUNCTION, the function changes as follows.

"BD/DVD" → "TUNER FM" → "TUNER AM" → "TV" → "SAT/CABLE" → "DMPORT" → "AUDIO" → …

Function	Source
"BD/DVD"	Disc that is played by the system
"TUNER FM"/ "TUNER AM"	FM/AM radio (page 56)
"TV"	TV (component that is connected to the TV (AUDIO IN L/R) jacks or TV (DIGITAL IN OPTICAL) jack on the rear panel (page 25))
"SAT/CABLE"	Component that is connected to the SAT/CABLE (DIGITAL IN COAXIAL) jack on the rear panel (page 26)
"DMPORT"	DIGITAL MEDIA PORT adapter (page 60)
"AUDIO"	Component that is connected to the AUDIO (AUDIO IN L/R) jacks on the rear panel (page 26)

Step 6: Enjoying Surround Sound

You can enjoy surround sound simply by selecting one of the system's pre-programmed decoding modes. They bring the exciting and powerful sound of movie theaters into your home.



Selecting surround sound effects based on your listening preference

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "AUDIO MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "DEC. MODE" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ repeatedly until the surround sound effect you want appears in the front panel display.**

See the table below for surround sound effect descriptions.

5 **Press ⊕.**

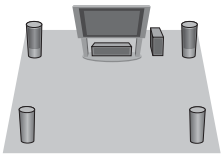
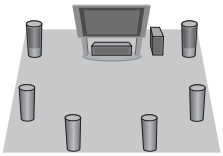
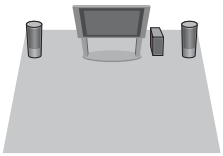
The setting is made.

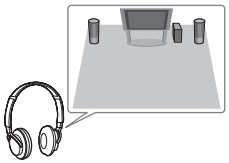
6 **Press SYSTEM MENU.**

The system menu turns off.

About speaker output

The table below describes the options when you connect all the speakers to the unit.
The default setting is “A.F.D. 7.1CH” (when connecting the headphones to the surround amplifier, the default setting is “HP 2CH”).

Sound from	Surround effect	Effect
Depending on the source.	“A.F.D. STD” (AUTO FORMAT DIRECT STANDARD)	The system discriminates the sound format of the source and presents sound as it was recorded/encoded.
	“A.F.D. 7.1CH” (AUTO FORMAT DIRECT 7.1CH) “PRO LOGIC” “PLII MOVIE” “PLII MUSIC”	• 2 channel source: The system simulates surround sound from 2 channel sources and outputs sound from the 5.1 channel speakers. – “A.F.D. 7.1CH” outputs sound from the 5.1 channel speakers by duplicating 2 channel source sound across each speaker. – “PRO LOGIC” performs Dolby Pro Logic decoding. – “PLII MOVIE” performs Dolby Pro Logic II movie mode decoding. – “PLII MUSIC” performs Dolby Pro Logic II music mode decoding. • Multi-channel source: The system outputs sound from the speakers depending on the number of channels of the source. “A.F.D. 7.1CH” creates the surround back sound virtually and gives you the sound as 7.1 channel surround sound.
	“A.F.D. 7.1CH” (AUTO FORMAT DIRECT 7.1CH) “PLIIx MOVIE” “PLIIx MUSIC”	These decoding modes appear only when you use the Wireless Surround Speaker Kit (WAHT-SBP1, optional) for the surround back speakers (page 17). • 2 channel source: The system simulates surround sound from 2 channel sources and outputs sound from all the speakers including the surround back speakers. – “A.F.D. 7.1CH” outputs sound from the 7.1 channel speakers by duplicating 2 channel source sound across each speaker. – “PLIIx MOVIE” performs Dolby Pro Logic IIx movie mode decoding. – “PLIIx MUSIC” performs Dolby Pro Logic IIx music mode decoding. • Multi-channel source: The system outputs sound from the speakers depending on the number of channels of the source.
	“2CH STEREO”	The system outputs the sound from the front speakers and subwoofer regardless of sound format or number of channels. Multi-channel surround formats are downmixed to 2 channels.

Sound from	Surround effect	Effect
	"HP 2CH"[2)] (HEADPHONE 2 CHANNEL STEREO)	This decoding mode appears only when you connect headphones to the surround amplifier (page 32). The system outputs the sound from the headphones regardless of sound format or number of channels. Multi-channel surround formats are downmixed to 2 channels.

To turn the sound effect off

Select "A.F.D. STD" for "DEC. MODE."

Note

- When you select "A.F.D. 7.1CH," depending on the disc or source, the beginning of the sound may be cut off while the optimum mode is automatically selected. To avoid cutting the sound, select "A.F.D. STD."
- When the input signal is multi-channel source, "PRO LOGIC," "PLII MOVIE," and "PLII MUSIC" are canceled and the multi-channel source is output directly.
- When the bilingual broadcast sound is input, "PRO LOGIC," "PLII MOVIE," and "PLII MUSIC" are not effective.
- "A.F.D. 7.1CH," "PRO LOGIC," "PLII MOVIE," "PLII MUSIC," "PLIIx MOVIE," and "PLIIx MUSIC" are canceled when you set the sound mode (page 52) to either of the following settings.
 - "SPORTS"
 - "OMNI-DIR"
 - "MOVIE-D.C.S.-"
- Depending on the input stream, the decoding mode may not be effective.
- When changing the decoding mode while using the S-AIR receiver, sound from the S-AIR receiver may skip.

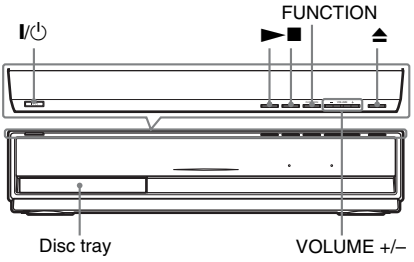
Tip

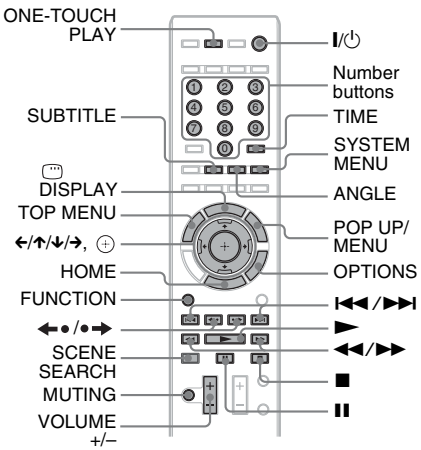
- The system memorizes the last decoding mode selected for each function.
 Whenever you select a function such as "BD/DVD" or "TUNER FM," the decoding mode that was last applied to the function is automatically applied again. For example, if you select "BD/DVD" with "PRO LOGIC" as the decoding mode, then change to another function, and then return to "BD/DVD," "PRO LOGIC" will be applied again.

Playing a BD/DVD

BD DVD

Depending on the disc, some operations may be different or restricted.
Refer to the operating instructions supplied with your disc.





1 **Turn on your TV.**

2 **Switch the input selector on the TV to this system.**

3 **Press I/⏻.**

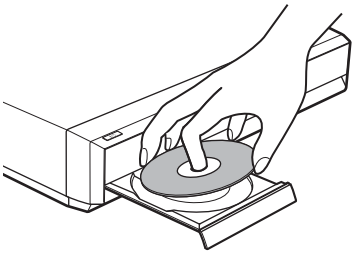
The system turns on.

4 **Press FUNCTION repeatedly until "BD/DVD" appears in the front panel display.**

5 **Press ⏏.**

6 **Place a disc.**

Place one disc on the disc tray, and then press ⏏.



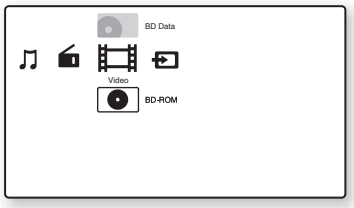
When you insert a commercially available BD-ROM or DVD VIDEO, playback may automatically start depending on the disc. In this case, go to Step 9.

Note

- When you play an 8 cm disc, place it on the inner circle of the tray. Be careful that the disc is not skewed on the inner circle of the tray.
- Do not place more than one disc on the tray.

7 **Press ←/→ to select [Video].**

8 **Press ↑/↓ to select ●, then press ► or ⊕.**



For commercially available BD-ROM or DVD VIDEO, playback starts.

For a BD or DVD recorded on other equipment, the title list appears. Press ↑/↓ to select the desired title, then press ► or ⊕.

Playback starts.

9 **Press VOLUME +/– to adjust the volume.**

The volume level appears on the TV screen and in the front panel display.

Note

• When you set the [Control for HDMI] function to [On], the TV that is connected to the system with an HDMI cable can be sync-operated with the system. For details, see "Using the Control for HDMI Function for "BRAVIA" Sync" (page 67).

Tip

• You can change the speed at which the volume is turned up and down.
To turn the volume up/down quickly, press and hold VOLUME +/–.
To set the volume up/down precisely, press VOLUME +/– briefly.

Other operations

To	Press
Stop	■
Pause	❚❚
Resume play after pause	❚❚ or ►
Go to the next chapter	►►I
Go back to the preceding chapter	I◄◄ twice in a second. When you press I◄◄ once, you can go to the beginning of the current chapter.
Turn off the sound temporarily	MUTING To cancel, press it again or VOLUME + to adjust the sound volume.
Remove the disc	⏏ on the unit.
Locate a point quickly by playing a disc in fast forward or fast reverse (Scan)[1)]	►► or ◄◄ while playing a disc. Each time you press ►► or ◄◄ during scan, the playback speed changes as follows: Playback direction ►►1 (×10) → ►►2 (×30) → ►►3 (×120) Reverse direction ◄◄ (×1) → ◄◄1 (×10) → ◄◄2 (×30) → ◄◄3 (×120) When you press and hold the button, fast forward/fast reverse continues at the selected speed until you release the button. To return to normal speed, press ►. Actual speeds may differ with some discs.
Play in slow, freeze frame (playback direction only)	►► for more than one second in pause mode. When you press ►► briefly in pause mode, you can play one frame at a time. Depending on the disc, this function may not work. To return to normal playback, press ►.
Replay the previous scene[2)]	←• (instant replay) during playback.
Briefly fast forward the current scene[3)]	•→ (instant advance) during playback.

[1)]Scan speeds may differ with some discs.

[2)]BD/DVD VIDEO/DVD-RW/DVD-R only.

[3)]BD/DVD VIDEO/DVD-RW/DVD-R/DVD+RW/DVD+R only.

To play a restricted BD or DVD (Parental Control)

When you play a restricted BD

Change [BD Parental Control] in [BD/DVD Viewing Settings] (page 84).

When you play a restricted DVD

Change [DVD Parental Control] in [BD/DVD Viewing Settings] (page 84).

When you play a restricted BD or DVD, the display for entering your password appears on the screen.
Enter your four-digit password using the number buttons, and press ⊕.
Playback starts.
To register or change the password, see [Password] (page 85).

To play a restricted BD-RE or BD-R (Disc Lock)

When you play a BD-RE or BD-R restricted by the Disc Lock function, the display for entering your password appears on the screen.

1 **Enter the four-digit password that has been registered when creating the disc using the number buttons, and press ⊕.**

2 **Select a title, and press ► or ⊕.**
Playback starts.

One-Touch Play (for HDMI connection only)

Press ONE-TOUCH PLAY.

The system and the connected TV turn on and the input selector on the TV is switched to the system; then you can enjoy the contents of a disc.

Note

- When using the HDMI connection, there may be a delay before the playback picture appears on the screen, and the beginning portion of the playback picture may not be displayed.
- To use this function, set [Control for HDMI] to [On] in [HDMI Settings] (page 86).

Available OPTIONS

1 **Press OPTIONS.**

The options menu appears.

2 **Press ↑/↓ to select an item, then press ⊕.**

The available items differ depending on the disc type or system situation.

Items	Details
[Video Settings]	Adjusts settings for picture (page 47).
[Title List]	Displays the title list.
[Play]	Plays the title from the point where you pressed ■.
[Play from beginning]	Plays the title from the beginning.
[Top Menu]	Displays the disc's Top Menu (page 44).
[Menu/Popup Menu]	Displays the BD-ROM's Pop-up Menu or DVD's menu (page 44).
[Stop]	Stops playback.
[Title Search]	Searches for a title and starts playback from the beginning (page 45).
[Chapter Search]	Searches for a chapter and starts playback from the beginning (page 45).

Changing the angles

BD DVD

If various angles (multi-angles) for a scene are recorded on a disc, you can change the viewing angle.

Press ANGLE during playback to select the desired angle.

Displaying the subtitles

BD DVD

If subtitles are recorded on a disc, you can turn the subtitles on/off during playback. If multilingual subtitles are recorded on the disc, you can change the subtitle language during playback, or turn the subtitles on/off whenever you want.

Press SUBTITLE during playback to select the desired subtitle language.

Resuming playback from the point where you stopped the disc

(Resume Play)

BD DVD

When you stop the disc, the system remembers the point where you pressed ■. As long as you do not remove the disc, Resume Play will work even if the system is set to standby mode by pressing I/⏻.

1 **While playing a disc, press ■ to stop playback.**

2 **Press ↑/↓ to select ⊙, then press ► or ⊕.**

The system starts playback from the point where you stopped the disc in Step 1.

Note

- Depending on where you stop the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing may be cleared when:
 - you open the disc tray.
 - you play another title.
 - you change the settings on the system.
 - you disconnect the AC power cord (mains lead).
 - you remove the external memory (for BD-ROMs).
- This function may not work properly with some discs.

To play from the beginning of the title

Press OPTIONS to select [Play from beginning], then press ⊕. Playback starts from the beginning of the title.

Using the BD's or DVD's menu

BD DVD

To display the Top Menu

A BD/DVD is divided into a lot of sections, which make up a picture or music feature. These sections are called "titles." When you play a BD/DVD which contains several titles, you can select the title you want using the Top Menu. You can also select items such as the language for the subtitles and the language for the sound using the Top Menu.

1 **Press TOP MENU.**

The disc's menu appears on the TV screen. The contents of the menu vary depending on the disc.

2 **Press ←/↑/↓/→ or the number buttons to select the item you want to play or change.**

3 **Press ⊕.**

To display Pop-up Menus

Some BD-ROMs contain Pop-up Menus that appear without interrupting playback.

1 **Press POP UP/MENU during playback.**

The Pop-up Menu appears.

2 **Press ←/↑/↓/→, the color buttons, or number buttons to select the item, and follow the on-screen instructions.**

Searching for a scene quickly

(Scene Search)

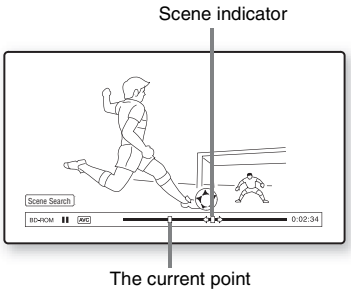
BD DVD

You can move quickly between scenes within the title currently being played back.

1 **Press SCENE SEARCH during playback or in pause mode.**

Playback pauses and a bar with a scene indicator (square-shaped – indicates the current point) appears at the bottom of the screen.

2 **Press and hold ←/→ or ◀◀/▶▶ to move the scene indicator to the scene you are searching for.**



The scene indicator on the bar is displayed around the playing point.

3 **Release the button at the point you want to watch.**

The scene at which you released the button is displayed in pause mode.

To search for a scene again, move the scene indicator using ←/→ or ◀◀/▶▶.

4 **Press SCENE SEARCH, ⊕, ▶, or II.**

Playback starts.

To cancel Scene Search mode

Press SCENE SEARCH, ⊕, ▶, or II. Playback starts from the point you pressed the button.

Note

- The Scene Search function is available for titles longer than 100 seconds and shorter than 100 hours.
- Depending on the disc, this function may not work.

Searching for a Title/Chapter

BD DVD

You can search for a chapter if the title contains chapter marks.

1 **Press OPTIONS during playback or in pause mode.**

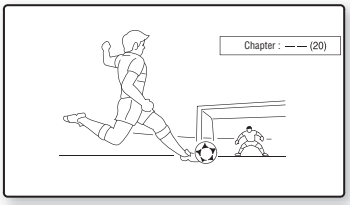
The options menu appears.

2 **Press ↑/↓ to select a search method, then press ⊕.**

- [Title Search] (for a BD-ROM/DVD VIDEO): Searches the desired title.
- [Chapter Search]: Searches the desired chapter.

The display for entering the number appears.

Example: Chapter Search



3 **Press the number buttons to enter the number of the title or chapter.**

If you make a mistake, press CLEAR, and re-enter another number.

4 **Press ⊕.**

After a while, the system starts playback from the selected number.

To cancel [Title Search]/[Chapter Search]

Press RETURN.

Displaying the playing time and play information

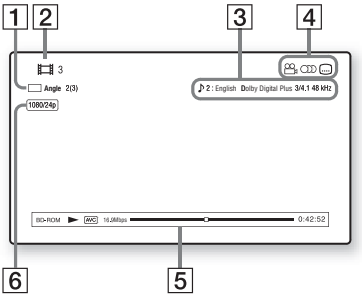
BD DVD

You can check the title information, including the video transmission rate, etc.

Press DISPLAY during playback.

The displayed information differs depending on the disc type and system status.

Example: When playing a BD-ROM



1 The current selected angle

2 Title number or name

3 The currently selected audio setting

4 Available functions (angle/audio/subtitle)

5 Playback information
Displays Disc type/Play mode/Video codec/Bit rate/Playing status bar/Playing time (Remaining time*)

6 Output resolution/Video frequency

* Displayed when you press TIME repeatedly.

Tip

- You can also check the playback information in the front panel display.
- You can change each setting by pressing SUBTITLE, AUDIO, or ANGLE.

To view the playing time and remaining time in the front panel display

Press TIME repeatedly.

Each time you press TIME while playing the disc, the display changes:
① ⟷ ②

① Playing time of the current title
② Remaining time of the current title

Some displayed items may disappear after a few seconds.

Adjusting pictures for videos

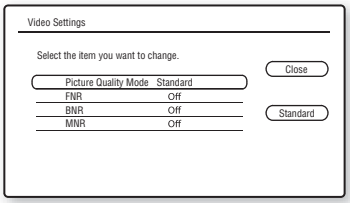
BD DVD

1 **Press OPTIONS during playback.**

The options menu appears.

2 **Press ↑/↓ to select [Video Settings], then press ⊕.**

The [Video Settings] screen appears.



3 **Press ↑/↓ to select an item, then press ⊕.**

[Picture Quality Mode]

Optimizes the picture settings for different lighting environments.

- [Standard]
- [Brighter Room]
- [Theater Room]

[FNR]

Reduces random noise appearing in the picture.

- [Off]
- [Auto]

[BNR]

Reduces mosaic-like block noise in the picture.

- [Off]
- [Auto]

[MNR]

Reduces minor noise around the picture outlines (mosquito noise).

- [Off]
- [Auto]

4 **Press ←/↑/↓/→ to select or adjust the settings, then press ⊕.**

To adjust any other items, repeat steps 3 and 4.

Note

- Set the picture setting of your TV to [Standard] before changing [Picture Quality Mode].
- [Video Settings] is disabled when the connected TV is set to Theater Mode (page 68).
- Depending on the disc or the scene being played, [FNR], [BNR], or [MNR] effects may be hard to discern.

Adjusting the delay between the picture and sound

(A/V SYNC)

BD DVD

When the sound does not match the pictures on the TV screen, you can adjust the delay between the picture and sound.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "AUDIO MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "A/V SYNC" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to adjust the delay between the picture and sound.**

You can adjust from 0 ms to 300 ms in 25 ms increments.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

Note

- Depending on the input stream, A/V SYNC may not be effective.

Enjoying BonusView/BD-Live

BD

Some BD-ROMs with "BD-LIVE Logo*" have bonus contents and other data that can be downloaded to the external memory (local storage) for enjoyment.

* BD LIVE™

1 **If a disc is inserted, remove the disc from the unit.**

2 **Turn the system off.**

3 **Insert the external memory (not supplied) into the EXT slot on the rear of the unit.**

The external memory is used as the local storage.

Make sure that the external memory is properly inserted into the unit (page 29).

4 **Connect the system to a network (page 30).**

5 **Turn the system on.**

6 **Set [BD Internet Connection] to [Allow] in [BD/DVD Viewing Settings] (page 85).**

7 **Insert a BD-ROM with BONUSVIEW/BD-LIVE.**

The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

To delete data in the external memory

You can delete unnecessary data.

1 **If a disc is inserted, remove the disc from the unit.**

2 **Press HOME.**

3 **Press ←/→ to select [Video].**

4 **Press ↑/↓ to select [BD Data], then press ⊕.**

5 **Select the disc name, then press OPTIONS.**

6 **Select [Erase], then press ⊕.**

7 **Select [OK], then press ⊕.**

The data of the selected disc will be deleted.

Note

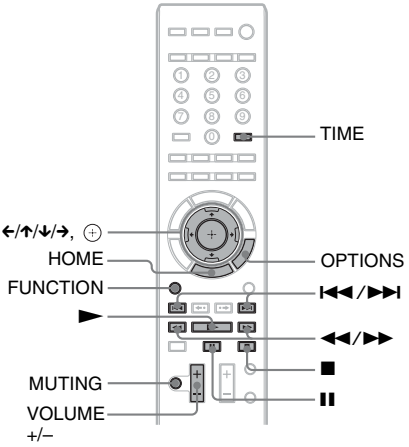
- Depending on the BD-ROM, the disc name may not be displayed.

Tip

- To delete all data in the external memory at once, select [Erase All] in Step 6.
- Press ⊕ instead of OPTIONS in Step 5 to skip Step 6.

Playing a CD

CD



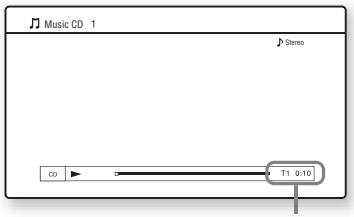
1 **Press FUNCTION repeatedly until "BD/DVD" appears in the front panel display.**

2 **Insert a CD.**

The Music Player screen appears.

3 **Press ►.**

Playback starts.



Current track number and elapsed time

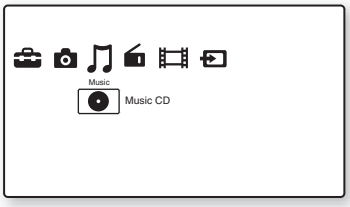
4 **Adjust the volume by pressing VOLUME +/–.**

The volume level appears on the TV screen and in the front panel display.

To select a track

1 **Press HOME.**

2 **Press ←/→ to select ♫ [Music].**



3 **Press ⊕.**

The music list appears.

4 **Press ↑/↓ to select a track, then press ► or ⊕.**

The system plays the selected track.

Other operations

To	Press
Stop	■
Pause	II
Resume play after pause	II or ►
Start playback from the point where you pressed ■.	►
Go to the next track	►►I
Go back to the preceding track	I◄◄ twice in a second. When you press I◄◄ once, you can go to the beginning of the current track.
Turn off the sound temporarily	MUTING To cancel, press it again or VOLUME + to adjust the sound volume.
Remove the disc	⏏ on the unit.
Fast reverse/fast forward	◄◄ or ►► during playback.

Available OPTIONS

1 **Press OPTIONS.**

The options menu appears.

2 **Press ↑/↓ to select an item, then press ⊕.**

The available items differ depending on the disc type or system situation.

Items	Details
[Play]	Plays the selected track.
[Play from beginning] (during playback)	Plays the current track from the beginning.
[Play from beginning] (in stop mode)	Plays the selected track from the beginning.
[Stop]	Stops playback.

Note

- The point where you stopped playing (resume point) is cleared from memory when:
 - You open the disc tray.
 - You turn the system off.

To view the playing time and remaining time in the front panel display

Press TIME repeatedly.

Each time you press TIME while playing the disc, the display changes:
① → ② → ③ → ④ → ① → ...

① Playing time of the current track
② Remaining time of the current track
③ Playing time of the disc
④ Remaining time of the disc

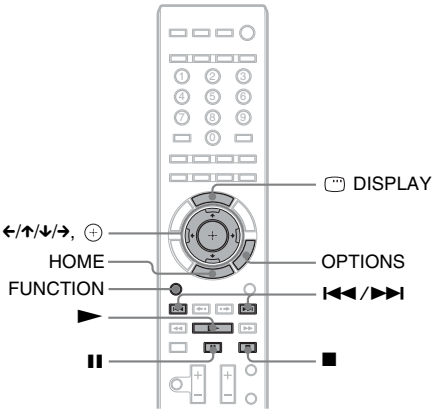
Playing Photo Files

BD [1] DATA DVD [2] DATA CD [3]

[1]BD-REs/BD-Rs containing JPEG image files

[2]DVD+RWs/DVD+Rs/DVD-RWs/DVD-Rs containing JPEG image files

[3]CD-RWs/CD-Rs containing JPEG image files

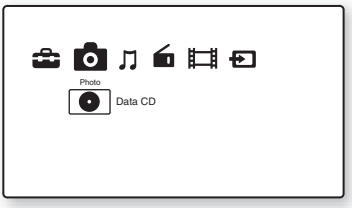


1 **Press FUNCTION repeatedly until "BD/DVD" appears in the front panel display.**

2 **Insert a disc that contains photo files.**

3 **Press HOME.**

4 **Press ←/→ to select [Photo].**



5 **Press ⊕.**

The file list or folder list appears.

6 **Press ↑/↓ to select a file or folder, then press ⊕.**

When you select a folder, press ↑/↓ to select a file in the folder, then press ⊕.
The selected photo file is displayed.

Other operations

To	Press
Play a slideshow	►
Stop a slideshow	■
Pause a slideshow	II
Go to the next photo	►►I
Go back to the preceding photo	I◄◄
Display the file information	DISPLAY

Available OPTIONS

1 Press OPTIONS.

The options menu appears.

2 Press ↑/↓ to select an item, then press ⊕.

The available items differ depending on the situation.

Items	Details
[Slideshow Speed][1)][2)]	Changes the slideshow speed. • [Fast] • [Normal] • [Slow]
[Stop][1)]	Stops a slideshow.
[Rotate Left][1)]	Rotates the photo counterclockwise by 90 degrees.
[Rotate Right][1)]	Rotates the photo clockwise by 90 degrees.
[View Image][2)]	Displays the selected picture.
[Slideshow][2)]	Starts a slideshow.

[1)]Appears when you press OPTIONS during playback of photo files.

[2)]Appears when you press OPTIONS while the file/folder list is displayed.

Note

- When you attempt to play the following photo files, the mark appears on the screen and they cannot be played.
 - Photo files with width or height larger than 8,192 pixels
 - Photo files with width or height smaller than 15 pixels
 - Photo files exceeding 32 MB
 - Photo files with extreme aspect ratios (greater than 50:1 or 1:50)
 - Photo files in Progressive JPEG format
 - Photo files that have a ".jpeg" or ".jpg" extension, but are not in JPEG format
 - Photo files that have an extremely long name
- The following photo files cannot be played.
 - Photo files recorded on BD-Rs in any format other than UDF (Universal Disk Format) 2.6
 - Photo files recorded on BD-REs in any format other than UDF (Universal Disk Format) 2.5
- The following photo files or folders cannot be displayed in the file list or folder list.
 - Photo files that have an extension other than ".jpeg" or ".jpg"
 - Photo files that have an extremely long name
 - Photo files in the 5th tree and photo files/folders in the 6th tree or lower
 - Folders beyond the 500th folder, when the total number of folders and files in a single tree exceeds 500
- Photo files edited on a PC may not be played.
- Thumbnail images of some photo files may not be displayed.
- Large photo files may take some time to display or to start a slideshow.

To view images in high picture quality

If you have a Sony TV compatible with "PhotoTV HD," you can enjoy images in high picture quality by the following connection and setting.

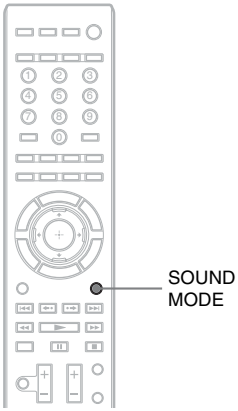
1 Connect the unit to the TV using an HDMI cable.

2 Set the TV's video setting to [VIDEO-A] mode.

For details on [VIDEO-A], refer to the operating instructions supplied with the TV.

Selecting the Effect to Suit the Source

You can select a suitable sound mode for movies or music.



Press SOUND MODE repeatedly during playback until the desired mode appears in the front panel display.

- "AUTO": The system selects "MOVIE" or "MUSIC" automatically to produce the sound effect depending on the disc or sound stream.
- "MOVIE": The system provides the sound for movies.
- "MOVIE-D.C.S.-"*: The system reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio.
- "MUSIC": The system provides the sound for music.
- "SPORTS": The system adds reverberation for the sports program.
- "NEWS": The system provides the sound for the voice program, such as news.
- "OMNI-DIR": The same sound is audible anywhere in the room.

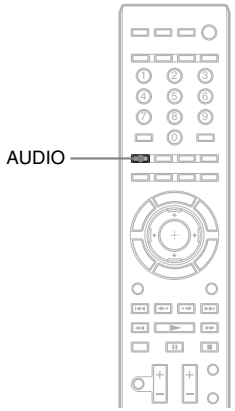
* DCS technology is used.

Note

- When you connect headphones to the surround amplifier, the sound mode is disabled.
- Depending on the disc or source, when you select "AUTO," the beginning of the sound may be cut off as the system selects the optimum mode automatically. To avoid cutting the sound, select other than "AUTO."
- Depending on the input stream, the sound mode may not be effective.
- When changing the sound mode while using the S-AIR receiver, sound from the S-AIR receiver may skip.

Selecting the Audio Format, Multilingual Tracks, or Channel

When the system is playing a BD/DVD VIDEO recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can change the audio format. If the BD/DVD VIDEO is recorded with multilingual tracks, you can also change the language.
With a CD, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers.



Press AUDIO repeatedly during playback to select the desired audio signal.

The audio information appears on the TV screen.

■ BD/DVD VIDEO

Depending on the BD/DVD VIDEO, the choice of language varies.
When 4 digits are displayed, they indicate a language code. See “Language Code List” (page 108) to confirm which language the code represents. When the same language is displayed two or more times, the BD/DVD VIDEO is recorded in multiple audio formats.

■ DVD-VR

The types of sound tracks recorded on a disc are displayed.
Example:

- [♪ Stereo]
- [♪ Stereo (Audio1)]
- [♪ Stereo (Audio2)]
- [♪ Main]
- [♪ Sub]
- [♪ Main/Sub]

Note

- [♪ Stereo (Audio1)] and [♪ Stereo (Audio2)] do not appear when only one audio stream is recorded on the disc.

■ CD

- [♪ Stereo]: The standard stereo sound.
- [♪ 1/L]: The sound of the left channel (monaural).
- [♪ 2/R]: The sound of the right channel (monaural).

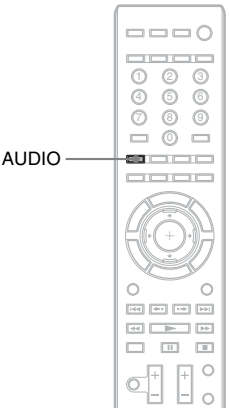
Enjoying Multiplex Broadcast Sound

(DUAL MONO)

You can enjoy multiplex broadcast sound when the system receives or plays a Dolby Digital multiplex broadcast signal.

Note

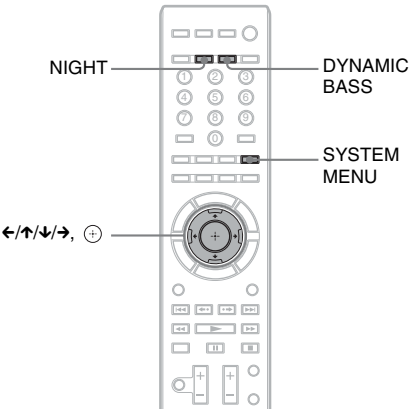
- To receive the Dolby Digital signal, you need to connect a TV or other component to the unit with an optical or coaxial digital cord (pages 25, 26) and set the digital output mode of the TV or other component to Dolby Digital.



Press AUDIO repeatedly until the desired signal appears in the front panel display.

- "MAIN": Sound of the main language will be output.
- "SUB": Sound of the sub language will be output.
- "MAIN/SUB": Mixed sound of both the main and sub languages will be output.

Using the Sound Effect



Reinforcing bass frequencies

You can reinforce bass frequencies.

Press DYNAMIC BASS.

"D. BASS ON" appears in the front panel display and bass frequencies are effectively reinforced.
During this mode is on, "BASS" lights up in the front panel display.

To turn off the sound effect

Press DYNAMIC BASS so that "BASS" disappears from the front panel display.

Enjoying sound at low volume

You can enjoy sound effects or dialog, as you would in a movie theater, even at low volume. It is useful for watching movies at night.

Press NIGHT.

"NIGHT ON" appears in the front panel display and the sound effect is activated.
During the night mode is on, "NIGHT" lights up in the front panel display.

Note

- When sound is output from the center speaker, this effect is more pronounced, as speech (movie dialog, etc.) is easy to hear. When sound is not output from the center speaker, or you are using the headphones, the system optimally adjusts the volume.

To turn off the sound effect

Press NIGHT so that "NIGHT" disappears from the front panel display.

Changing the tonal balance

You can adjust the sound by changing the tonal balance of the sound.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "AUDIO MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "TONE" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select the desired setting, then press ⊕.**

- "BASS": You can adjust the bass frequencies.
- "TREBLE": You can adjust the treble frequencies.

5 **Press ↑/↓ to adjust the sound.**

The adjusted value appears in the front panel display. You can set the value from –6 to +6.

6 **Press ⊕.**

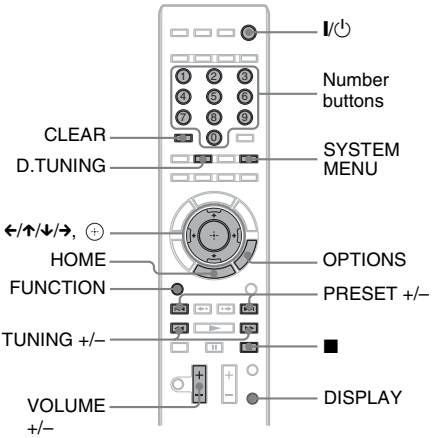
The setting is made.

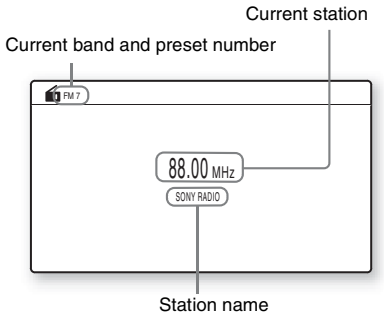
7 **Press SYSTEM MENU.**

The system menu turns off.

Listening to the Radio

You can enjoy radio sound with the system's speakers.





Tip

• You can operate the tuner function using the tuner menu on the front panel display. See "Operating the tuner function using the system menu" (page 58)

1 **Press FUNCTION repeatedly until "TUNER FM" or "TUNER AM" appears in the front panel display.**

2 **Select the radio station.**

Automatic tuning

Press and hold TUNING +/– until the auto scanning starts.

[Auto Tuning] appears on the TV screen. Scanning stops when the system tunes in a station.

To stop the automatic tuning manually, press TUNING +/– or ■.

"TUNED" and "ST" (for stereo program) light up in the front panel display.

Manual tuning

Press TUNING +/– repeatedly.

3 **Adjust the volume by pressing VOLUME +/–.**

To turn off the radio

Press I/⏻.

To change the AM tuning interval

1 **Press FUNCTION repeatedly until "TUNER AM" appears in the front panel display.**

2 **Press and hold ► and FUNCTION on the unit until "AM 9K STEP" or "AM 10K STEP" appears in the front panel display.**

Tip

• To improve reception, reorient the connected antennas (aerials).

Available OPTIONS

1 **Press OPTIONS.**

The options menu appears.

2 **Press ↑/↓ to select an item, then press ⊕.**

The available items differ depending on the situation.

Items	Details
[Preset Memory]	Preset 20 FM stations, 10 AM stations.
[Direct Tuning]	Input station frequency directly.
[FM Mode]	Select monaural or stereo reception of FM programs.

To view the station name or frequency in the front panel display

When the system is set to “TUNER FM” or “TUNER AM,” you can check the frequency using the front panel display.

Press DISPLAY.

Each time you press DISPLAY on the remote, the display changes as shown.

① Station name*
② Frequency**

* This is displayed if you have entered a name for a preset station.

** Returns to the original display after several seconds have elapsed.

Presetting radio stations

You can preset 20 FM stations, and 10 AM stations. Before tuning, make sure to turn down the volume to minimum.

1 **Press FUNCTION repeatedly until “TUNER FM” or “TUNER AM” appears in the front panel display.**

2 **Press and hold TUNING +/– until the auto scanning starts.**

[Auto Tuning] appears on the TV screen.

Scanning stops when the system tunes in a station.

“TUNED” and “ST” (for stereo program) light up in the front panel display.

3 **Press OPTIONS.**

The options menu appears.

4 **Press ↑/↓ to select [Preset Memory], then press ⊕.**

5 **Press ↑/↓ to select the preset number you want.**

6 **Press ⊕.**

The setting is made.

To change the preset number

Select the desired preset number by pressing PRESET +/–, then perform the procedure from Step 3.

Selecting the preset station

1 **Press FUNCTION repeatedly until “TUNER FM” or “TUNER AM” appears in the front panel display.**

The last received station is tuned in.

2 **Press PRESET +/– repeatedly to select the preset station.**

The preset number and frequency appear on the TV screen and front panel display.

Each time you press the button, the system tunes in one preset station.

Tip

• You can select the preset station number directly by pressing the number buttons.

Selecting a radio station by inputting a frequency directly

When you know the frequencies, you can select radio stations by inputting the frequencies directly.

1 **Press FUNCTION repeatedly until “TUNER FM” or “TUNER AM” appears in the front panel display.**

2 **Press OPTIONS.**

The options menu appears.

3 **Press ↑/↓ to select [Direct Tuning], then press ⊕.**

4 **Press the number buttons to select the frequencies.**

5 **Press ⊕.**

The setting is made.

To operate by using D.TUNING

1 **Press FUNCTION repeatedly until "TUNER FM" or "TUNER AM" appears in the front panel display.**

2 **Press D.TUNING.**



3 **Press the number buttons to select the frequencies.**

4 **Press ⊕.**

If an FM program is noisy

If an FM program is noisy, you can select monaural reception. There will be no stereo effect, but reception will improve.

1 **Press OPTIONS.**

The options menu appears.

2 **Press ↑/↓ to select [FM Mode], then press ⊕.**

3 **Press ↑/↓ to select [Monaural].**

- [Stereo]: Stereo reception.
- [Monaural]: Monaural reception.

4 **Press ⊕.**

The setting is made.

Operating the tuner function using the system menu

You can operate the tuner function using the system menu on the front panel display.

To preset radio stations

1 **Press FUNCTION repeatedly until "TUNER FM" or "TUNER AM" appears in the front panel display.**

2 **Press and hold TUNING +/– until the auto scanning starts.**

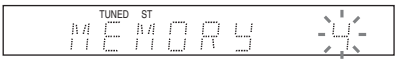
Scanning stops when the system tunes in a station. "TUNED" and "ST" (for stereo program) light up in the front panel display.

3 **Press SYSTEM MENU.**

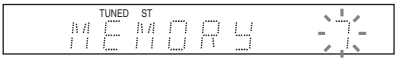
4 **Press ↑/↓ repeatedly until "TUNER MENU" appears in the front panel display, then press ⊕ or →.**

5 **Press ↑/↓ repeatedly until "MEMORY" appears in the front panel display, then press ⊕ or →.**

A preset number appears in the front panel display.



6 **Press ↑/↓ to select the preset number you want.**



Tip

- You can select the preset number directly by pressing the number buttons.

7 **Press ⊕.**

"COMPLETE" appears in the front panel display, and the station is stored.

8 **Repeat Steps 2 to 8 to store other stations.**

9 **Press SYSTEM MENU.**

The system menu turns off.

To change the preset number

Select the desired preset number by pressing PRESET +/–, then perform the procedure from Step 3.

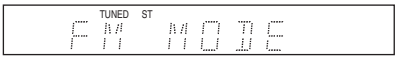
If an FM program is noisy

If an FM program is noisy, you can select monaural reception. There will be no stereo effect, but reception will improve.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "TUNER MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "FM MODE" appears in the front panel display.**



4 **Press ⊕ or →.**

5 **Press ↑/↓ to select "MONO."**

- "STEREO": Stereo reception.
- "MONO": Monaural reception.

6 **Press ⊕.**

The setting is made.

7 **Press SYSTEM MENU.**

The system menu turns off.

To name preset stations

You can enter a name for preset stations. These names (for example, "ABC") appear in the front panel display when a station is selected.
Only one name can be entered for each preset station.

1 **Press FUNCTION repeatedly until "TUNER FM" or "TUNER AM" appears in the front panel display.**

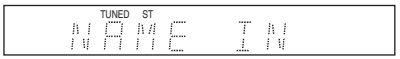
The last received station is tuned in.

2 **Press PRESET +/– repeatedly to select the preset station you want to create an index name for.**

3 **Press SYSTEM MENU.**

4 **Press ↑/↓ repeatedly until "TUNER MENU" appears in the front panel display, then press ⊕ or →.**

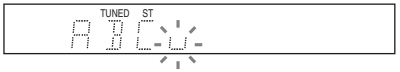
5 **Press ↑/↓ repeatedly until "NAME IN" appears in the front panel display.**



6 **Press ⊕ or →.**

7 **Create a name by using ←/↑/↓/→.**

Press ↑/↓ to select a character, then press → to move the cursor to the next position.



You can input letters, numbers, and other symbols for a radio station.

If you make a mistake

Press ←/→ repeatedly until the character to be changed flashes, then press ↑/↓ to select the desired character.

To erase the character, press ←/→ repeatedly until the character to be erased flashes, then press CLEAR.

8 **Press ⊕.**

"COMPLETE" appears in the front panel display, and the station name is stored.

9 **Press SYSTEM MENU.**

The system menu turns off.

External Audio Device

Using the DIGITAL MEDIA PORT Adapter

The DIGITAL MEDIA PORT (DMPORT) adapter is for enjoying sound from a portable audio source or computer. By connecting a DIGITAL MEDIA PORT adapter, you can enjoy sound from the connected component on the system.
Available DIGITAL MEDIA PORT adapters vary in each area.
For details on connecting the DIGITAL MEDIA PORT adapter, see “Connecting the other components” (page 26).

Note

- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
- Do not connect or disconnect the DIGITAL MEDIA PORT adapter to/from the unit while the system is turned on.
- Depending on the type of DIGITAL MEDIA PORT adapter, images are also output. In this case, the system outputs a composite video signal only, regardless of the type of video signal.
- When you use the system and a Bluetooth Wireless Audio Adapter (such as TDM-BT1, not supplied) at the same time, transmission distance between the Bluetooth transmitter and Bluetooth Wireless Audio Adapter may be reduced. In this case, place the Bluetooth transmitter as far as possible from the system, or move the Bluetooth Wireless Audio Adapter closer to the Bluetooth transmitter.
- When you use the system and the Wireless Network Audio Adapter (such as TDM-NC1, not supplied) at the same time, place the Wireless Network Audio Adapter as far as possible from the system.

Playing the connected component on the system

1 Press FUNCTION repeatedly until “DMPORT” appears in the front panel display.

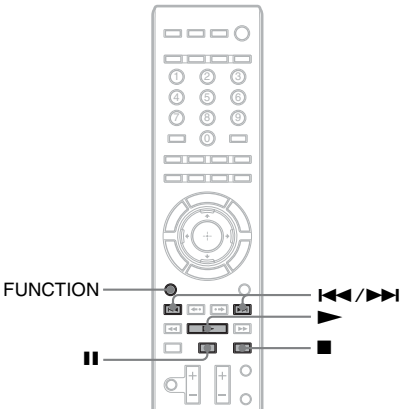
2 Start playback of the connected component.

The sound and images from the connected component are played on the system or connected TV.

For operation details, refer to the operating instructions of the DIGITAL MEDIA PORT adapter.

Tip

- Depending on the type of DIGITAL MEDIA PORT adapter, you may be able to operate a connected component using either the buttons on the remote or the unit. The following illustration shows an example of buttons that can be used in this case.



To enhance compressed sound

You can enhance compressed sound such as an MP3 audio file. This effect is activated automatically when you set the decoding mode to “A.F.D. STD” (page 38) while the “DMPORT” function is selected. To cancel the effect, select other than “A.F.D. STD.”

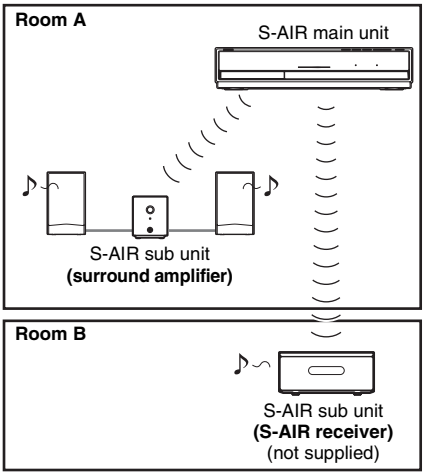
Using an S-AIR Product

The unit is compatible with the S-AIR function (page 122), which allows sound transmission between S-AIR products.

About S-AIR products

There are two types of S-AIR product.

- S-AIR main unit (this unit): This is for transmitting sound. You can use up to three S-AIR main units. (The number of usable S-AIR main units depends on the use environment.)
- S-AIR sub unit: This is for receiving sound.
 - **Surround amplifier:** You can enjoy surround speaker sound wirelessly.
 - **S-AIR receiver:** You can enjoy system sound in another room.



Note

- You cannot operate this function if you do not insert the wireless transceiver in the unit correctly (page 28).

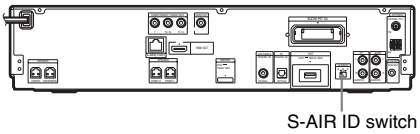
Establishing sound transmission between the unit and S-AIR sub unit (ID setting)

For the surround amplifier
For the S-AIR receiver

Simply by matching the ID of the unit and the S-AIR sub unit, you can establish sound transmission.

To set the ID of the unit

1 **Set the S-AIR ID switch of the unit to the desired ID.**



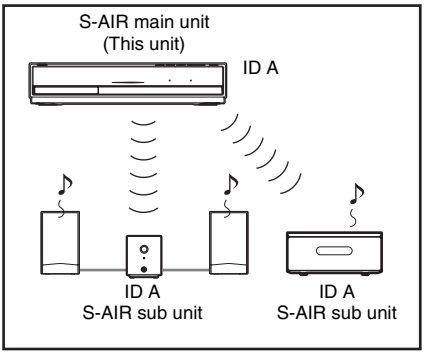
You can select any ID (A, B, or C).

2 **Press I/⏻.**

The system turns on.

3 **Set the S-AIR sub unit to the same ID.**

Sound transmission is established as follows (example):



To set the ID of the surround amplifier

1 **Make sure that the SURROUND SELECTOR switch of the surround amplifier is set to SURROUND.**

2 **Set the S-AIR ID switch of the surround amplifier to match the ID (A, B, or C) of the unit.**

3 **Press POWER on the surround amplifier.**

When sound transmission is established, the POWER / ON LINE indicator of the surround amplifier turns green.

For details of the POWER / ON LINE indicator, see "To check the transmission status" (page 32).

Tip

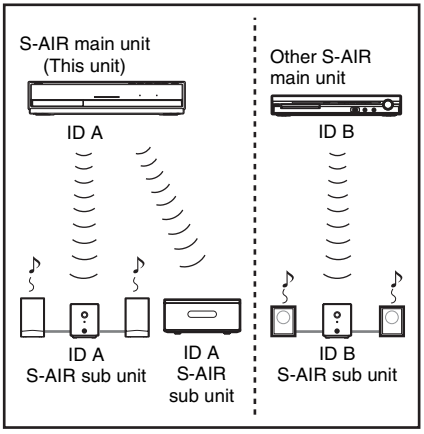
- When you use the Wireless Surround Speaker Kit (WAHT-SBP1, optional) for the surround back speakers (page 17), set the SURROUND SELECTOR switch to SURROUND BACK.

To set the ID of the S-AIR receiver

Refer to the operating instructions of the S-AIR receiver.

To use multiple S-AIR main units

You can use multiple S-AIR main units by setting a different ID for each component.



Enjoying the system's sound in another room

For the S-AIR receiver

You can enjoy the system's sound by using the S-AIR receiver. The S-AIR receiver can be placed in another room for enjoying the system's sound there.

For details of the S-AIR receiver, refer to the operating instructions of the S-AIR receiver.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "S-AIR MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "S-AIR MODE" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select the desired setting.**

- "PARTY": The S-AIR receiver outputs sound according to functions set on the unit.
- "SEPARATE": You can set the desired function for the S-AIR receiver while unit functions do not change.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

7 **Select the desired function on the S-AIR receiver.**

■ When "PARTY" is set

The **S-AIR receiver's** function changes sequentially as you press FUNCTION of the main unit (page 37) or S-AIR CH of the S-AIR receiver.

■ When "SEPARATE" is set

The **S-AIR receiver's** function changes by pressing S-AIR CH of the S-AIR receiver as follows.

"MAIN UNIT" → "TUNER FM" → "TUNER AM" → "DMPORT" → "AUDIO" → …

To enjoy the same function as the unit, select “MAIN UNIT.”

When “TUNER FM” or “TUNER AM” is selected on the unit, you can only select the same band on the S-AIR receiver. When other than “TUNER FM” or “TUNER AM” is selected on the unit, you can select any band for the tuner on the S-AIR receiver.

8 Adjust the volume on the S-AIR receiver.

Note

- When the sound is other than 2 channel stereo, multi-channel sound is downmixed to 2 channel.
- The sound of the S-AIR receiver may be cut off by operation of the unit.

To set “S-AIR MODE” via the remote

Press S-AIR MODE.

The S-AIR mode appears in the front panel display. Each time you press S-AIR MODE, the S-AIR mode changes.

To control the system from the S-AIR receiver

You can control the system from the S-AIR receiver by using the following buttons.

Press	Operation
►, II, ■, I◄◄/►►I	Share the same operations on the remote and unit.
S-AIR CH	Change the function of the system.

For details, refer to the operating instructions of the S-AIR receiver.

Enjoying the S-AIR receiver while the unit is in standby mode

For the S-AIR receiver

You can enjoy the S-AIR receiver while the unit is in standby mode by setting “S-AIR STBY” to “STBY ON.”

1 Press SYSTEM MENU.

2 Press ↑/↓ repeatedly until “S-AIR MENU” appears in the front panel display, then press ⊕ or →.

3 Press ↑/↓ repeatedly until “S-AIR STBY” appears in the front panel display, then press ⊕ or →.

4 Press ↑/↓ to select the desired setting.

- “STBY ON”: You can enjoy the S-AIR receiver while the unit is in standby mode or turned on. The power consumption during standby mode increases.
- “STBY OFF”: You cannot enjoy the S-AIR receiver while the unit is in standby mode.

5 Press ⊕.

The setting is made.

6 Press SYSTEM MENU.

The system menu turns off.

Note

- When you turn the system off while “S-AIR STBY” is set to “STBY ON,” “S-AIR” flashes (when sound transmission between the unit and S-AIR receiver is not established), or lights up (when sound transmission between the unit and S-AIR receiver is established) in the front panel display.

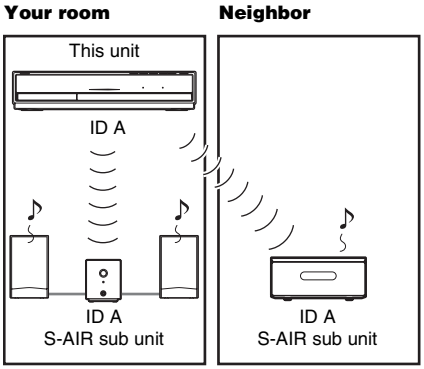
Identifying the unit with a specific S-AIR sub unit (Pairing operation)

For the surround amplifier
For the S-AIR receiver

It is easy to set the same ID for the unit and an S-AIR sub unit, such as a surround amplifier or S-AIR receiver, to establish sound transmission. However, neighbors may also receive your system's sound if IDs are the same, or you may receive sound from neighbors. To prevent this, you can identify the unit with a specific S-AIR sub unit by performing the pairing operation.

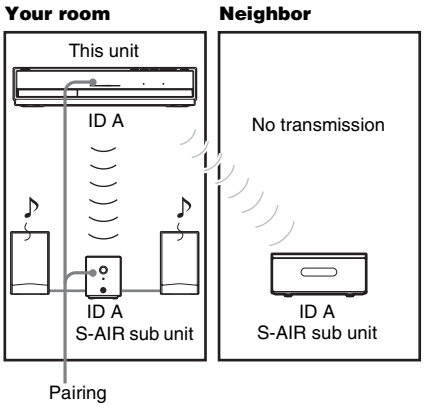
■ Before pairing

Sound transmission is established by the ID (example).



■ After pairing

Sound transmission is established between the paired unit and S-AIR sub unit(s) only.



To perform pairing

1 **Place the S-AIR sub unit that you want to pair near the unit.**

Note

• Remove headphones from the surround amplifier (if connected).

2 **Match the IDs of the unit and the S-AIR sub unit.**

- To set the ID of the unit, see "To set the ID of the unit" (page 61).
- To set the ID of the surround amplifier, see "To set the ID of the surround amplifier" (page 62).
- To set the ID of the S-AIR receiver, refer to the operating instructions of the S-AIR receiver.

3 **Press SYSTEM MENU.**

4 **Press ↑/↓ repeatedly until "S-AIR MENU" appears in the front panel display, then press ⊕ or →.**

5 **Press ↑/↓ repeatedly until "PAIRING" appears in the front panel display, then press ⊕ or →.**

6 **Press ↑/↓ repeatedly until "START" appears in the front panel display, then press ⊕.**

The unit starts pairing and "SEARCH" flashes in the front panel display.

To cancel pairing, press SYSTEM MENU.

7 **Start pairing of the S-AIR sub unit.**

■ For the surround amplifier

Press POWER on the surround amplifier to turn on the surround amplifier and press PAIRING on the rear panel of the surround amplifier.

The PAIRING indicator of the surround amplifier flashes red when pairing starts. When sound transmission is established, the PAIRING indicator of the surround amplifier turns red and "PAIRING" and "COMPLETE" appear alternately in the front panel display.

Tip

• To press PAIRING on the rear panel of the surround amplifier, a slim instrument, such as a paper clip, can be used.

■ For the S-AIR receiver

Refer to the operating instructions of the S-AIR receiver.

When sound transmission is established, "PAIRING" and "COMPLETE" appear alternately in the front panel display.

Note

• Perform pairing within several minutes of Step 5. If you do not, "PAIRING" and "INCOMPLETE" appear alternately in the front panel display. To continue pairing, press ⊕ and start again from Step 5. To cancel pairing, press SYSTEM MENU.

8 **Press SYSTEM MENU.**

The system menu turns off.

Note

• When you perform pairing, "(PAIRING)" appears beside ID on the display for selecting ID.

To cancel pairing

Change the ID setting of the unit by using the S-AIR ID switch of the unit. If you select a new ID, pairing is canceled.

Checking the S-AIR status of the unit

You can check the S-AIR status such as the S-AIR ID or pairing information.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "S-AIR MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "S-AIR INFO" appears in the front panel display, then press ⊕ or →.**

The S-AIR ID of the unit appears in the front panel display. When the unit is paired, "(PAIRING)" appears beside ID.

4 **Press SYSTEM MENU.**

The system menu turns off.

If sound transmission is unstable

For the surround amplifier
For the S-AIR receiver

If you use multiple wireless systems which share the 2.4 GHz band, such as wireless LAN or Bluetooth, the transmission of S-AIR products or other wireless systems may be unstable. In this case, the transmission may be improved by changing the following "RF CHANGE" setting.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "S-AIR MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "RF CHANGE" appears in the front panel display, then press ⊕ or →.**

4 Press ↑/↓ to select the desired setting.

- "AUTO": Normally select this. The system changes "RF CHANGE" to "ON" or "OFF" automatically.
- "ON": The system transmits sound by searching for a better channel for transmitting.
- "OFF": The system transmits sound by fixing the channel for transmitting.

5 Press ⊕.

The setting is made.

6 Press SYSTEM MENU.

The system menu turns off.

7 When you set "RF CHANGE" to "OFF," select the ID so that sound transmission is most stable (page 61).

Note

- In most cases, you will not need to change this setting.
 - If "RF CHANGE" is set to "OFF," transmission between the unit and S-AIR sub unit can be performed using one of the following channels.
 - S-AIR ID A: equivalent channel for IEEE 802.11b/g channel 1
 - S-AIR ID B: equivalent channel for IEEE 802.11b/g channel 6
 - S-AIR ID C: equivalent channel for IEEE 802.11b/g channel 11
- The transmission may be improved by changing the transmission channel (frequency) of the other wireless system(s). For details, refer to the operating instructions of the other wireless system(s).

Using the Control for HDMI Function for "BRAVIA" Sync

This function is available on TVs with the "BRAVIA" Sync function only.
By connecting Sony components that are compatible with the Control for HDMI function with an HDMI cable, operation is simplified as below:

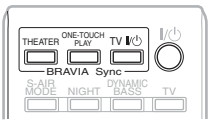
– Theater Mode (page 68)
– One-Touch Play (page 68)
– System Power Off (page 68)
– Volume Limit (page 69)
– System Audio Control (page 69)
– Language Follow (page 69)

Control for HDMI is a mutual control function standard used by CEC (Consumer Electronics Control) for HDMI (High-Definition Multimedia Interface).

The Control for HDMI function will not work in the following cases:

– When you connect this system to a component which is not compatible with the Control for HDMI function.
– A component does not have an HDMI jack.

There are convenient buttons on the system's remote for operating the TV, such as THEATER, ONE-TOUCH PLAY, and TV I/⏻. For details, see "Controlling Your TV with the Supplied Remote" (page 73) and refer to the operating instructions of the TV.



Note

• Depending on the connected component, the Control for HDMI function may not work. Refer to the operating instructions supplied with the component.
• The Control for HDMI function may not work if you connect a component other than Sony, even if the component is compatible with the Control for HDMI function.

Preparing for the Control for HDMI function

(Control for HDMI - Easy Setting)

The system is compatible with the Control for HDMI - Easy Setting function. If the TV is compatible with the Control for HDMI - Easy Setting function, you can set the system's [Control for HDMI] function automatically by setting the TV. For details, refer to the operating instructions of the TV.

If the TV is not compatible with the Control for HDMI - Easy Setting function, set the Control for HDMI function of the system and TV manually.

Note

• For details on setting the TV, refer to the operating instructions.

1 **Make sure that the system and the TV are connected with an HDMI cable.**

2 **Turn on the TV and press I/⏻ to turn on the system.**

3 **Switch the input selector on your TV so that the signal from the system through the HDMI input appears on the TV screen.**

4 **Set the Control for HDMI function of the system and TV.**

The Control for HDMI function for system and TV is simultaneously set to on.

To set the [Control for HDMI] function of the system to on/off manually

1 **Press HOME.**

The home menu appears on the TV screen.

2 **Press ←/→ to select [Setup].**

3 **Press ↑/↓ to select [HDMI Settings], then press ⊕.**

The options for [HDMI Settings] appear.

4 **Press ↑/↓ to select [Control for HDMI], then press ⊕.**

5 **Press ↑/↓ to select the setting, then press ⊕.**

- [On]: On.
- [Off]: Off.

Note

- During the setting of the Control for HDMI function for the system, the System Audio Control function does not work.

Tip

- The default setting of the Control for HDMI function of the system is [On].

Using the Theater Mode

(Theater Mode)

If your TV is compatible with the Theater mode, when you press THEATER, you can enjoy the optimum video mode and sound quality suited for movies, and TV sound is output from the system's speakers automatically. Also, the TV's video mode switches to Theater Mode.

Watching BD/DVD by a single button press

(One-Touch Play)

By only pressing ONE-TOUCH PLAY, the TV turns on, the TV is set for BD/DVD input selector, and the system starts playing a disc automatically.

Also, when you insert a disc, One-Touch Play is enabled. If One-Touch Play does not start (in the case of inserting a disc that is not compatible with the auto playback function), press ► or ONE-TOUCH PLAY.

The system and TV work as follows (e.g.):

This system	TV
Turns on. (If not already turned on.)	Turns on. (If not already turned on.)
↓	↓
Switches to "BD/DVD" function.	Switches to HDMI input.
↓	↓
Starts playing the disc and outputs the sound.	Minimizes sound level. (System Audio Control)

Turning the system off in sync with the TV

(System Power Off)

When you turn the TV off by using the POWER button on the TV's remote or TV I/⏻ on the system's remote, the system turns off automatically.

Note

- Before using the System Power Off function, set the function for TV power. For details, refer to the operating instructions of the TV.
- Depending on the status, the system or the connected components may not turn off automatically. For details, see the operating instructions supplied with the connected components.

Enjoying TV sound from the speakers in this system

(System Audio Control)

You can enjoy TV sound in this system by easy operation.
To use this function, connect the system and the TV with an audio cord and an HDMI cable (page 24).

You can use the System Audio Control function as follows:

- You can enjoy TV sound from the speakers of the system by means of a simple operation. For details, see the operating instructions of the TV.
- When the system is turned on, TV sound will be output from the speakers of the system.
- When TV sound is output from the speakers of the system, you can adjust the volume and turn off the sound of the system using the TV remote.

Note

- While the TV is in PAP (picture and picture) mode, the System Audio Control function will not work. When the TV exits PAP mode, the output method of the TV returns to the one before PAP mode.

Setting the Maximum Volume Level of the System

(Volume Limit)

If you change the output method of the TV to the system speaker on the TV menu or by pressing THEATER, loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume. For details, see [Volume Limit] (page 86).

Changing the language for the on-screen display of the TV

(Language Follow)

When you change the language for the on-screen display of the TV, the system's on-screen display language is also changed after turning the system off and on.

Calibrating the Appropriate Settings Automatically

[Auto Calibration]

D. C. A. C. (Digital Cinema Auto Calibration) can set the appropriate surround sound automatically.

Note

- The system outputs a loud test sound when [Auto Calibration] starts. You cannot turn the volume down. Give consideration to children and neighbors.

1 **Press HOME.**

The home menu appears on the TV screen.

2 **Press ←/→ to select [Setup].**

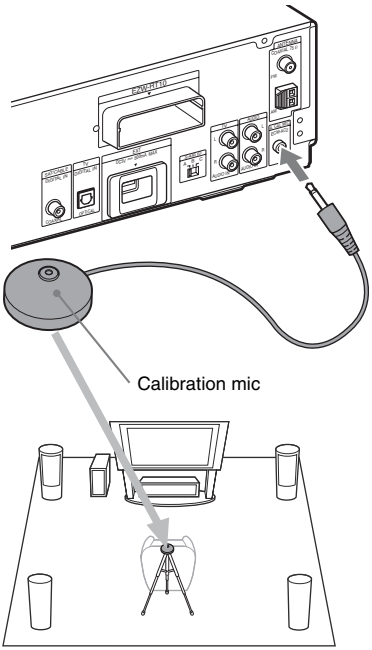
3 **Press ↑/↓ to select [Audio Settings], then press ⊕.**

4 **Press ↑/↓ to select [Auto Calibration], then press ⊕.**

The confirmation display for [Auto Calibration] appears.

5 **Connect the calibration mic to the A.CAL MIC jack on the rear panel.**

Set up the calibration mic at ear level using a tripod, etc. (not supplied). The front of each speaker should face the calibration mic, and there should be no obstruction between the speakers and the calibration mic.



6 **Press ↑/↓ to select [Start].**

To cancel, select [Cancel].

7 **Press ⊕.**

[Auto Calibration] starts.

The system adjusts the speaker settings automatically.

Be quiet during the measurement.

Note

- Before [Auto Calibration], make sure that the surround amplifier turns on and you install the surround amplifier in the appropriate location. If you install the surround amplifier in an improper location, such as another room, proper measurement will not be obtained.
- When you use the Wireless Surround Speaker Kit (WAHT-SBP1, optional) for the surround back speakers (page 17), install the speakers in appropriate location and turn the surround amplifier on.
- Loud test sound is output when [Auto Calibration] starts. You cannot turn the volume down. Give consideration to children and neighbors.

8 **Confirm the conclusions of [Auto Calibration].**

The conclusions appear on the TV screen. Press ←/→ to change the page. The first page shows the distance of speakers. The second page shows the level of speakers.

Note

• If measurement fails, follow the message then retry [Auto Calibration].

Tip

• You can change a measurement unit (feet or meters) by pressing the color button (RED).

9 **Press ↑/↓ to select [OK] or [Cancel], then press ⊕.**

■ The measurement is OK.

Disconnect the calibration mic, then select [OK]. The result is implemented.

■ The measurement is not OK.

Follow the message, then select [OK] to retry.

Note

• While the Auto Calibration function works:
 – do not turn off the power.
 – do not press any button.
 – do not change the volume.
 – do not change the function.
 – do not change the disc.
 – do not insert or eject a disc.
 – do not connect the headphones to the surround amplifier.
 – do not disconnect the calibration mic.

Setting the Speakers

[Speaker Settings]

To obtain the best possible surround sound, set connection of the speakers and their distance from your listening position. Then use the test tone to adjust the level and the balance of the speakers to the same level.

1 **Press HOME.**

The home menu appears on the TV screen.

2 **Press ←/→ to select [Setup].**

3 **Press ↑/↓ to select [Audio Settings], then press ⊕.**

4 **Press ↑/↓ to select [Speaker Settings], then press ⊕.**

The [Speaker Settings] display appears.

5 **Press ↑/↓ to select the item, press ⊕.**

Setup the following settings.

■ [Connection]

If you do not connect center or surround speakers, set the parameters for [Center] and [Surround]. Since the front speaker and subwoofer settings are fixed, you cannot change them.

When you use the Wireless Surround Speaker Kit (WAHT-SBP1, optional) for the surround back speakers (page 17), set [Surround Back] also.

[Front]

[Yes]

[Center]

[Yes]: Normally select this.
[None]: Select this if no center speaker is used.

[Surround]

[Yes]: Normally select this.
[None]: Select this if no surround speaker is used.

[Surround Back]

[Yes]: Select this if surround back speakers are used.
[None]: Select this if no surround back speaker is used.

[Subwoofer]

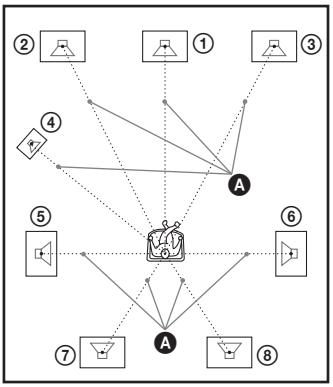
[Yes]

■ [Distance]

When you move the speakers, be sure to set the parameters of the distance (Ⓐ) from the listening position to the speakers.
You can set the parameters from 0 to 23 feet (0.0 to 7.0 meters).

The speakers in the illustration correspond to the following:

①Center speaker
②Front left speaker (L)
③Front right speaker (R)
④Subwoofer
⑤Surround left speaker (L)
⑥Surround right speaker (R)
⑦Surround back left speaker (L) (optional)
⑧Surround back right speaker (R) (optional)



[Front Left/Right] 10 ft/3.0 m: Set the front speaker distance.
[Center]* 10 ft/3.0 m: Set the center speaker distance.
[Surround Left/Right]* 10 ft/3.0 m: Set the surround speaker distance.
[Surround Back Left/Right]* 10 ft/3.0 m: Set the surround back speaker distance.
[Subwoofer] 10 ft/3.0 m: Set the subwoofer distance.

* This item appears when you set to [Yes] in the [Connection] setting.

Note

• Depending on the input stream, [Distance] may not be effective.

Tip

• You can change a measurement unit (feet or meters) by pressing the color button (RED).

■ [Level]

You can adjust the sound level of the speakers. You can set the parameters from –6.0 dB to +6.0 dB. Be sure to set [Test Tone] to [On] for easy adjustment.

[Front Left/Right] 0.0 dB: Set the front speaker level.
[Center]* 0.0 dB: Set the center speaker level.
[Surround Left/Right]* 0.0 dB: Set the surround speaker level.
[Surround Back Left/Right]* 0.0 dB: Set the surround back speaker level.
[Subwoofer] 0.0 dB: Set the subwoofer level.

* This item appears when you set to [Yes] in the [Connection] setting.

■ [Test Tone]

The speakers will emit a test tone to adjust [Level].

[Off]: The test tone is not emitted from the speakers.
[On]: The test tone is emitted from each speaker in sequence while adjusting level. When you select one of the [Speaker Settings] items, the test tone is emitted from each speaker in sequence.
Adjust the sound level as follows.

1 **Set [Test Tone] to [On].**

2 **Press ↑/↓ to select [Level], then press ⊕.**

3 **Press ↑/↓ to select the desired speaker type, then press ⊕.**

4 **Press ←/→ to select the left or right speaker, then press ↑/↓ to adjust the level.**

5 **Press ⊕.**

6 **Repeat Steps 3 to 5.**

7 **Press RETURN.**

The system returns to the previous display.

8 **Press ↑/↓ to select [Test Tone], then press ⊕.**

9 **Press ↑/↓ to select [Off], then press ⊕.**

Note

• The test tone signals are not output from the HDMI OUT jack.

Tip

• To adjust the volume of all the speakers at one time, press VOLUME +/–.

Controlling Your TV with the Supplied Remote

By adjusting the remote signal, you can control your TV with the supplied remote.

Note

• When you replace the batteries of the remote, the code number may reset itself to the default (SONY) setting. Reset the appropriate code number.

Preparing the remote for controlling the TV

Press and hold TV I/⏻ while entering your TV's manufacturer's code (see the table) using the number buttons. Then release TV I/⏻.

If you successfully set the manufacturer's code, the TV button flashes twice slowly. If the setting is unsuccessful, the TV button flashes five times quickly.

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the code that works with your TV.

Manufacturer	Code number
SONY	501 (default), 502
DAEWOO	506
EMERSON	567
FUNAI	548
GE	509
GOLDSTAR/LG	503, 517, 544, 568
GRUNDIG	533
HITACHI	514
ITT	521, 522
JVC	516
LOEWE	518
MITSUBISHI/MGA	527
NEC	503
NOKIA	521, 522, 573, 575
PANASONIC	553, 572
PHILIPS	515, 518, 557, 570
PIONEER	526

Manufacturer	Code number
RADIO SHACK	565
RCA/PROSCAN	510
SABA	530, 537, 558
SAMSUNG	515, 517, 544, 566, 569, 571, 574
SANYO	508, 545
SHARP	535, 565
TELEFUNKEN	547, 558
THOMSON	547, 549
TOSHIBA	541, 551
ZENITH	543

Controlling the TV with the remote

You can control the TV using the following buttons. To use these buttons (other than THEATER, TV I/⏻, TV INPUT), set the remote to the TV mode by pressing TV, so that TV lights up for 1 second.
To exit the TV mode, press TV so that TV flashes four times.

Note

- While in the TV mode, if you press any of the following buttons, TV lights up. (Depending on the manufacturer setting, some buttons may not work, and TV does not light up.)
- When you press other than the following buttons while the remote is in the TV mode, TV flashes four times and the remote exits the TV mode automatically, and the system is operated as the function of the pressed button.
- Depending on the TV, you may not be able to use some or all of the buttons.

By pressing	You can
TV I/⏻	Turn the TV on or off.
THEATER	Enjoy optimal images and sound suited for movies.
TV INPUT	Switch the TV's input source between the TV and other input sources.
VOLUME +/–	Adjust the TV volume.
CH +/–	Select the TV channel.
MUTING	Turn off the TV sound temporarily.

By pressing	You can
Number buttons, ⊙, ENTER	Select the TV channel.
HOME	Display the menu of the TV.
FAVORITES	Display the favorite channel list.
CC	Display closed captioning.
GUIDE	Display the Digital Electronic Programme Guide (EPG).
TOOLS	Display the operation menu for the current display.
RETURN	Return to the previous channel or layer on the menu of the TV.
•	Input "." (dot) when inputting numerics.
WIDE	Change the aspect ratio of the connected TV.
←/↑/↓/→, ⊕	Select the item on the menu.
DISPLAY	Display the information.

Tip

- The function of these buttons are same as the remote buttons of the SONY TV. For details, refer to the operating instructions of the TV.

Using the Sleep Timer

You can set the system to turn off at a preset time, so you can fall asleep listening to music. You can preset the time in 10-minute increments.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "SLEEP MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ to select a setting.**

The minutes display (the remaining time) changes by 10 minutes.

Tip

• You can select the remaining time by pressing the number buttons. In this case, you can preset the time in 1-minute increments.

4 **Press ⊕.**

The setting is made and "SLEEP" flashes in the front panel display.

5 **Press SYSTEM MENU.**

The system menu turns off.

Changing the Brightness of the Front Panel Display

The brightness of the front panel display can be set to either of 2 levels.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "DISP MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "DIMMER" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select the brightness of the front panel display.**

• "DIMMER OFF": Bright.
• "DIMMER ON": Dark.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

Deactivating the Buttons on the Unit

(Child Lock)

You can deactivate the buttons on the unit (except for I/⏻) for preventing misoperation, such as child mischief (child lock function).

Press ■ on the unit for more than 5 seconds.

"CHILD LOCK" and "ON" appear in the front panel display.
The child lock function is activated and the buttons on the unit are locked. (You can operate the system by using the remote.)
To cancel, press ■ for more than 5 seconds so that "CHILD LOCK" and "OFF" appear in the front panel display.

Note

• When you operate the buttons on the unit while the child lock function is on, "CHILD LOCK" appears in the front panel display.

About the demonstration

You can turn on/off the demonstration in the front panel display while the system is in standby mode.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "DISP MENU" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "DEMO" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select a setting.**

• "DEMO ON": On.
• "DEMO OFF": Off.

The default setting differs depending on the area.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

Tip

• When you purchase the system new, or if the system is at its factory default settings (page 90), you can turn off the demonstration simply by pressing I/⏻ on the remote.

Saving Power in Standby Mode

Check that the following settings are made:

– [Control for HDMI] is set to [Off] (page 67).
– “S-AIR STBY” is set to “STBY OFF” (page 63).
– “DEMO” is set to “DEMO OFF” (page 76).
– [Standby Mode] is set to [Normal] (page 87).

Using the Setup Display

You can make various adjustments of items such as picture and sound.
Select (Setup) on the home menu when you need to change the settings of the system.

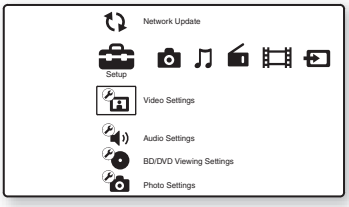
Note

- Playback settings stored in the disc take priority over the Setup Display settings and not all the functions described may work.

1 **Press HOME.**

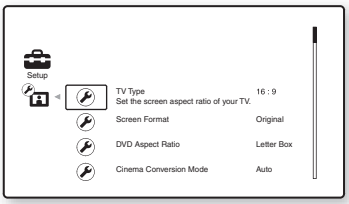
The home menu appears on the TV screen.

2 **Press ←/→ to select [Setup].**



3 **Press ↑/↓ to select the setup category icon to change, then press ⊕.**

Example: [Video Settings]

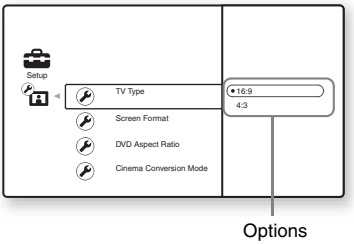


You can setup the following options.

Icon	Explanation
	[Network Update] (page 79) Updates the software of the system.
	[Video Settings] (page 80) Makes the video settings according to the type of connecting jacks.
	[Audio Settings] (page 82) Makes the audio settings according to the type of connecting jacks.
	[BD/DVD Viewing Settings] (page 84) Makes detailed settings for BD/DVD playback.
	[Photo Settings] (page 86) Makes the photo-related settings.
	[HDMI Settings] (page 86) Makes the HDMI settings.
	[System Settings] (page 87) Makes the system-related settings.
	[Network Settings] (page 88) Makes detailed settings for Internet and network.
1·2·3	**[Easy Setup] (page 89)** Re-runs the Easy Setup to make the basic settings.
	[Resetting] (page 90) Resets the system to the factory settings.

4 **Press ↑/↓ to select an item, then press ⊕.**

The options for the selected item appear.
Example: [TV Type]

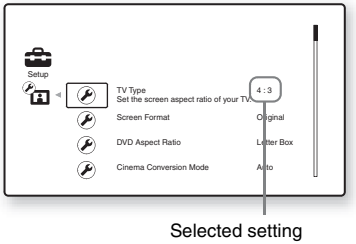


5 **Press ↑/↓ to select a setting, then press ⊕.**

The setting is selected and setup is complete.

The options for the selected item appear.

Example: [4:3]



[Network Update]

You can update and improve the functions of the system.

For information about update functions, refer to the following website:

http://esupport.sony.com

Note

- Do not disconnect the AC power cord (mains lead) or network cable while downloading or updating software.
- All operations, including opening the disc tray, are disabled while updating.
- Downloading times may differ depending on the server provider or line status.
- When error messages on network connections appear, check the network connections using [Network Diagnostic] of [Internet Settings] in [Network Settings] (page 88).

Tip

- The "UPDATE */9" counter ("*" indicates update step) in the front panel display also shows progress of the update.
- You can check the current software version by selecting [System Information] in [System Settings] (page 87).
- The [Setup] settings remain after updating.
- The system informs you of newer software version information when [Software Update Notification] is set to [On] (default) (page 87).

Updating the system's software using the network

1 **Press ↑/↓ to select [Network Update], then press ⊕.**

The unit connects to the network, and the display asks for confirmation.

2 **Press ←/→ to select [OK], then press ⊕.**

The unit starts downloading, then updating the software automatically.

When updating finishes, "COMPLETE" appears for 5 seconds in the front panel display, then the system automatically turns off.

3 **Press I/⏻ to turn the system on.**

The system starts up with the updated software.

Updating the system's software using an update disc

You can update and improve the functions of the system using an update disc provided by a Sony dealer or local authorized Sony service facility.

1 **Insert the update disc.**

The display asks for confirmation.

2 **Select [OK], and press ⊕.**

Software update starts.

When updating finishes, "COMPLETE" appears for 5 seconds in the front panel display, then the system automatically turns off.

3 **Press I/⏻ to turn the system on.**

The system starts up with the updated software.

4 **Press ⏏ to remove the disc.**

[Video Settings]

You can make the video settings according to the type of connecting jacks.

■ [TV Type]

You can select the aspect ratio of the connected TV.

[16:9]: Select this when connecting to a wide-screen TV or a TV with a wide-mode function.
[4:3]: Select this when connecting to a 4:3 screen TV without a wide-mode function.

■ [Screen Format]

You can select the display configuration for a 4:3 screen picture on a 16:9 wide-screen TV.

[Original]: Select this when connecting to a TV with a wide-mode function. Displays a 4:3 screen picture in 16:9 aspect ratio even on a wide-screen TV.
[Fixed Aspect Ratio]: Changes the picture size to fit the screen size with the original picture aspect ratio.

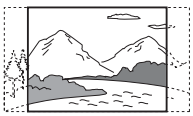
■ [DVD Aspect Ratio]

You can select the display configuration for playback of 16:9 screen pictures on a 4:3 screen TV (selectable when [TV Type] is set to [4:3] and [Screen Format] is set to [Fixed Aspect Ratio]).

[Letter Box]: Displays a wide picture with black bands on the top and bottom.



[Pan & Scan]: Displays a full-height picture on the entire screen, with trimmed sides.



■ [Cinema Conversion Mode]

You can set the video conversion method for 480p, 720p, 1080i, or 1080p* signals from the HDMI OUT jack or the COMPONENT VIDEO OUT jacks.

* HDMI only

[Auto]: Normally select this. The unit automatically detects whether the material is video-based or film-based, and switches to the appropriate conversion method.
[Video]: The conversion method suited for video-based material will always be selected regardless of the material.

■ [Output Video Format]

You can select the jack type to output video signals. For details, see "Video Output Resolution" (page 104).

1 Press ↑/↓ to select the jack type to output video signals, then press ⊕.

Note

- When connecting the HDMI OUT jack and other video output jacks at the same time, select [Component Video].

[TV Connection Method]

[HDMI]: Outputs signals from the HDMI OUT jack according to the [HDMI Resolution] setting below.
[Component Video]: Outputs signals from the COMPONENT VIDEO OUT jacks according to the [Component Resolution] setting below.
[Video]: Outputs signals from the VIDEO OUT jack.

2 (When you select [HDMI] or [Component Video])
Press ↑/↓ to select the signal type for the HDMI OUT jack or COMPONENT VIDEO OUT jacks, then press ⊕.

When you change the video output resolution, a picture is displayed in the selected resolution for about 30 seconds, then the display asks for confirmation.
Follow the on-screen instructions.
"HD" lights up in the front panel display when outputting 720p/1080i/1080p video signals.

Note

- If the picture is distorted or no picture appears, wait for about 30 seconds without pressing any buttons. The display returns to the resolution setting screen.
- If the selected video output resolution is incorrect, no picture appears on the screen when you press any button in 30 seconds. In this case, press and hold ► and ⏏ on the unit for more than 5 seconds to reset the video output resolution to the lowest resolution.
- When connecting the HDMI OUT jack and other video output jacks at the same time, video signals may not output from the jacks, other than from the HDMI OUT jack, when [Auto] or [1080p] is selected.

[HDMI Resolution]/[Component Resolution]

[Auto] (HDMI only): Normally select this. The unit outputs signals starting from the highest resolution acceptable to the TV: 1080p > 1080i > 720p > 480p > 480i
If the resulting image format is undesirable, try another setting that suits your TV.
[480i]: Outputs 480i video signals.
[480p]: Outputs 480p video signals.
[720p]: Outputs 720p video signals.
[1080i]: Outputs 1080i video signals.
[1080p] (HDMI only): Outputs 1080p video signals.

■ [BD-ROM 1080/24p Output]

You can set to output 1920 × 1080p/24 Hz video signals when playing film-based materials on BD-ROMs (720p/24 Hz or 1080p/24 Hz).
1920 × 1080p/24 Hz video signals can be output when all of the following conditions are met.

– You connect a 1080/24p-compatible TV using the HDMI OUT jack,
– [Output Video Format] is set to [HDMI], and
– [HDMI Resolution] is set to [Auto] or [1080p].

The 24P indicator lights up when outputting 1920 × 1080p/24 Hz video signals.

[Auto]: Outputs 1920 × 1080p/24 Hz video signals only when connecting a 1080/24p-compatible TV using the HDMI OUT jack.
[On]: Outputs 1920 × 1080p/24 Hz video signals regardless of the connected TV type.

[Off]: Select this when your TV is not compatible with 1080/24p video signals.

Note

• Video signals may not be output when [BD-ROM 1080/24p Output] is set to [On].

■ [YCbCr/RGB (HDMI)]

You can set the color setting for video signals output from the HDMI OUT jack. Select the setting that matches the connected TV type.

[Auto]: Automatically detects the type of external device, and switches to the matching color setting.
[YCbCr (4:2:2)]: Outputs YCbCr 4:2:2 video signals.
[YCbCr (4:4:4)]: Outputs YCbCr 4:4:4 video signals.
[RGB (16-235)]: Select this when connecting to a device with an HDCP-compliant DVI jack.
[RGB (0-255)]: Select this when connecting to an RGB (0-255) device.

■ [x.v.Color Output]

You can set whether to send xvYCC information to the connected TV.
Combining xvYCC-compatible video with a TV that supports x.v.Color display makes it possible to more accurately reproduce object colors present in the natural world.

[Auto]: Normally select this.
[Off]: Select this when the picture is unstable or colors appear unnatural.

■ [Pause Mode] (BD/DVD VIDEO/DVD-R/DVD-RW only)

You can select the picture in pause mode.

[Auto]: The picture, including subjects that move dynamically, is output with no jitter. Normally select this position.
[Frame]: The picture, including subjects that do not move dynamically, is output in high resolution.

[Audio Settings]

You can make the audio settings.

■ [BD Audio Setting]

You can select whether to mix or not mix the interactive audio (button sound, effect sound, etc.) and secondary audio (commentary) when playing a BD that contains such audio.

[Mix]: Outputs the audio obtained by mixing the interactive audio and secondary audio to the primary audio.
[Direct]: Outputs the primary audio only.

■ [Audio DRC] (BD/DVD VIDEO only)

You can compress the dynamic range of the sound track. [Audio DRC] is useful for watching movies at low volume late at night.

[Auto]: Performs playback at the dynamic range specified by the disc (BD-ROM only).
[Off]: No compression of dynamic range.
[On]: The system reproduces the sound track with the kind of dynamic range that the recording engineer intended.

■ [Attenuate - TV]

Distortion may occur when you listen to a component connected to the TV (AUDIO IN L/R) jacks. You can prevent distortion by reducing the input level on the unit. Distortion is not a malfunction and will depend on the component connected.

[On]: Attenuates the input level. The output level is changed.
[Off]: Normal input level.

■ [Attenuate - AUDIO]

Distortion may occur when you listen to a component connected to the AUDIO (AUDIO IN L/R) jacks. You can prevent distortion by reducing the input level on the unit. Distortion is not a malfunction and will depend on the component connected.

[On]: Attenuates the input level. The output level is changed.
[Off]: Normal input level.

■ [BD/DVD Audio Output]

The system cannot output multi-channel sound from both the HDMI OUT jack and system's speakers simultaneously. You can select the output method.

[Speaker only]: Outputs multi-channel sound from the system's speakers only.
[Speaker priority]: Outputs multi-channel sound from the system's speakers and 2-channel linear PCM signals from the HDMI OUT jack.
[HDMI priority]: Outputs 2-channel stereo sound from the system's speakers, and enables sound output from the HDMI OUT jack. Sound format from the HDMI OUT jack depends on the connected component.

Note

- When you set [BD/DVD Audio Output] to [HDMI priority], a confirmation message appears on the TV screen. Press ←/→ to select [OK] to complete the setup.
- When you set [BD/DVD Audio Output] to [HDMI priority], the SOUND MODE, DYNAMIC BASS, NIGHT, "TONE," and "DEC. MODE" functions are disabled.
- When the System Audio Control function (page 69) is activated, this setting may change automatically.

■ [Sound Effect]

You can set the system's sound effects (SOUND MODE, DYNAMIC BASS, NIGHT, "TONE," and "DEC. MODE") to on/off.

[On]: Enables all of the system's sound effects. The upper limit of sampling frequency is set to 48kHz.
[Off]: The sound effects are disabled. Select this when you do not want to set the upper limit of sampling frequency.

■ [Speaker Settings]

To obtain the best possible surround sound, set the speakers. For details, see "Setting the Speakers" (page 71).

■ [Auto Calibration]

You can calibrate the appropriate settings automatically. For details, see "Calibrating the Appropriate Settings Automatically" (page 70).

[BD/DVD Viewing Settings]

You can make detailed settings for BD/DVD playback.

■ [BD/DVD Menu]

You can select the default menu language for BD-ROMs or DVD VIDEOs.
When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 108).

■ [Audio]

You can select the default track language for BD-ROMs or DVD VIDEOs.
When you select [Original], the language given priority in the disc is selected.
When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 108).

■ [Subtitle]

You can select the default subtitle language for BD-ROMs or DVD VIDEOs.
When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 108).

■ [BD Parental Control]

Playback of some BD-ROMs can be limited according to the age of the users. Scenes may be blocked or replaced with different scenes.

1 Enter your four-digit password using the number buttons.

2 Press ↑/↓ to select [OK], then press ⊕.

3 Press ↑/↓ to select the age restriction, then press ⊕.

The lower the value, the stricter the limitation.

If you select [Select Age Restriction], you can enter the age restriction level from [0] to [255] using ←/↑/↓/→ and the number buttons.

To cancel the Parental Control setting

Select [No Restrictions].

Note

- If you forget the password, reset the system (page 90) and set a new password (see [Password] (page 85)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this unit.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.
- When [255] is selected in [Select Age Restriction], the Parental Control setting is canceled.

Tip

- You can change the password. See [Password] (page 85).

■ [DVD Parental Control]

Playback of some DVD VIDEOs can be limited according to a predetermined level such as the age of the users. Scenes may be blocked or replaced with different scenes.

1 Enter your four-digit password using the number buttons.

2 Press ↑/↓ to select [OK], then press ⊕.

3 Press ↑/↓ to select a level, then press ⊕.

The lower the value, the stricter the limitation.

To cancel the Parental Control setting

Select [No Restrictions].

Note

- If you forget the password, reset the system (page 90) and set a new password (see [Password] (page 85)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this unit.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.

Tip

- You can change the password. See [Password] (page 85).

■ [Parental Control Region Code]

Playback of some BD-ROMs or DVD VIDEOs can be limited according to the geographic area. Scenes may be blocked or replaced with different scenes.

1 **Enter your four-digit password using the number buttons.**

2 **Press ↑/↓ to select [OK], then press ⊕.**

3 **Press ↑/↓ to select the area restriction, then press ⊕.**

When you select [Select Region Code], the display for entering the region code appears. Enter the code for the area restriction by referring to "Parental Control/ Area Code List" (page 108).

Note

- If you forget the password, reset the system (page 90) and set a new password (see [Password] (page 85)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this unit.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.

Tip

- You can change the password. See [Password] (page 85).

■ [Password]

You can set or change the password for the Parental Control function. A password allows you to set a restriction on BD-ROM or DVD VIDEO playback. If necessary, you can differentiate the restriction levels for BD-ROMs and DVD VIDEOs.

1 **Enter your four-digit password using the number buttons.**

2 **Press ↑/↓ to select [OK], then press ⊕.**

To change the password

1 **After Step 1, enter your four-digit password using the number buttons.**

2 **Press ↑/↓ to select [OK], then press ⊕.**

3 **Enter a new password using the number buttons.**

4 **Press ↑/↓ to select [OK], then press ⊕.**

■ [Hybrid Disc Playback Layer]

You can select the layer priority when playing a Hybrid Disc. To change the setting, turn the system off and on again.

[BD]: Plays BD layer.
[DVD/CD]: Plays DVD or CD layer.

■ [BD Internet Connection]

You can set whether or not to allow Internet connections from the contents of a BD (in BDMV mode) being played. Network connections and settings are required when using this function (page 88).

[Allow]: Normally select this.
[Do not allow]: Prohibits Internet connection.

[Photo Settings]

You can make the photo-related settings.

■ [Slideshow Speed]

You can change the slideshow speed.

[Fast]: Photos change rapidly.
[Normal]: Photos change at normal speed.
[Slow]: Photos change slowly.

[HDMI Settings]

You can make the HDMI settings.

■ [Control for HDMI]

You can set the [Control for HDMI] function to on/off. For details, see "Using the Control for HDMI Function for "BRAVIA" Sync" (page 67).

[On]: On. You can operate mutually between components that are connected with an HDMI cable.
[Off]: Off.

■ [Volume Limit]

If you change the output method of the TV to the system speaker on the TV menu or by pressing THEATER, the System Audio Control (page 69) is activated and loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume.

[Level3]: Maximum volume level is set to 10.
[Level2]: Maximum volume level is set to 15.
[Level1]: Maximum volume level is set to 20.
[Off]: Off.

Note

- This function is available only when you connect the unit and TV with an HDMI cable and [Control for HDMI] is set to [On].

[System Settings]

You can make the system-related settings.

■ [OSD]

You can select your language for the system on-screen displays.

■ [Standby Mode]

You can shorten the startup time when turning the system on.

[Quick Start]: Shortens the startup time from standby mode. You can operate the system quickly after turning it on.
[Normal]: The default setting.

Note

- When [Standby Mode] is set to [Quick Start], power consumption will be higher than when [Standby Mode] is set to [Normal].

■ [Auto Display]

You can display information when switching audio modes or during playback.

[On]: Automatically displays information on the screen when changing the viewing titles, picture modes, audio signals, etc.
[Off]: Displays information only when you press DISPLAY.

■ [Screen Saver]

The screen saver image appears when you do not use the system for more than 15 minutes while an on-screen display, such as the home menu, is displayed on your TV screen. The screen saver image helps prevent your display device from becoming damaged (ghosting).

[On]: Turns on the screen saver function.
[Off]: Off.

■ [Software Update Notification]

You can get information on newer software versions. The information appears on the TV screen when you turn the system on. Network connections and settings are required when using this function (page 88).

[On]: Sets the system to inform you of newer software version information (page 79).
[Off]: Off.

■ [System Information]

You can display the system's software version information and the MAC address.

[Network Settings]

You can make detailed settings for Internet and network.

■ [Internet Settings]

These items are necessary when you connect to the Internet via a network cable. Enter the respective (alphanumeric) values for your broadband router or Wireless LAN router. The items that need to be set may differ, depending on the Internet service provider or the router. For details, refer to the instruction manuals that have been provided by your Internet service provider or supplied with the router.

1 **Press ↑/↓ to select [IP Address Acquisition], then press ⊕.**

2 **Press ↑/↓ to select an item, then press ⊕.**

[Use DHCP]: Select this when DHCP (Dynamic Host Configuration Protocol) server settings are available from your Internet service provider. The network settings necessary for the system will be assigned automatically.

If you set [DNS Server Auto Acquisition] to [Off], set the following items:

– [DNS Server (Primary)]
– [DNS Server (Secondary)]

[Use Static IP Address]: Set the IP address manually according to your network environment.

Set the following items:

– [IP Address]
– [Subnet Mask]
– [Default Gateway]
– [DNS Server (Primary)]
– [DNS Server (Secondary)]

Note

• When you set the [DNS Server (Primary)]/[DNS Server (Secondary)] addresses manually, enter the [DNS Server (Primary)] address. Otherwise, the [Internet Settings] will be set incorrectly.

3 **If your ISP has a specific proxy server setting, press ↑/↓ to select [Proxy Settings], then press ⊕.**

The [Proxy Settings] display appears.

If the proxy server does not have a specific setting, go to step 8.

4 **Press ↑/↓ to select [Use of Proxy Server], then press ⊕.**

5 **Press ↑/↓ to select [On], then press ⊕.**

6 **Select [Proxy Server] and [Port], and enter the settings.**

To enter the proxy server, see "To enter characters" (page 88).

7 **Press RETURN.**

8 **Press ↑/↓ to select [Network Diagnostic], then press ⊕.**

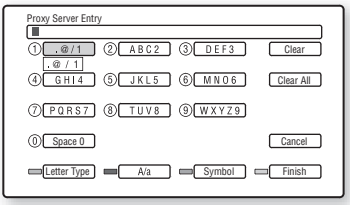
9 **Press ←/→ to select [Start], then press ⊕.**

10 **Check that the message [Network connections are correct.] appears.**

The setup is finished. If the message does not appear, follow the on-screen messages.

To enter characters

The display for entering characters appears when you select [Proxy Server] in [Proxy Settings].



1 **Press the number button repeatedly to select a character.**

Example:

Press the number 3 button once to enter [D].

Press the number 3 button three times to enter [F].

2 **Press →, and enter the next character.**

3 **Press YELLOW ([Finish]) to finish.**

You can use the following buttons to enter characters.

Buttons	Details
RED [Letter Type]	Switches the keyboard between alphabet and numbers.
GREEN [A/a]	Switches the keyboard between upper case and lower case.
BLUE [Symbol]	Displays the keyboard for symbols.
YELLOW [Finish]	The input is entered, and the system returns to the previous display.
CLEAR [Clear]/[Clear All]	Erases the character to the right of the cursor. To erase all displayed characters, press and hold CLEAR for 2 seconds or more.
RETURN [Cancel]	Returns to the previous display, canceling the input.
←/↑/↓/→, ⊕	• Select an input function using ←/↑/↓/→, and press ⊕. • Enter characters as follows: ①Select a character selection panel using ←/↑/↓/→, and press ⊕. ②Select a character using ←/→, and press ⊕.

1·2·3 [Easy Setup]

You can recall the Easy Setup to make the basic settings.

1 **Press ←/→ to select [Start], then press ⊕.**

2 **Follow the instructions for "Step 4: Performing the Easy Setup" (page 34) from step 4.**

[Resetting]

Resetting the system settings other than the settings related to password

You can reset the system settings to their factory default. Settings can be reset by function group. All the settings within the group will be reset.

1 **Press ⊕ to select [Reset to Factory Default Settings], then press ⊕.**

2 **Press ↑/↓ to select the settings you want to reset to default, then press ⊕.**

You can reset the following settings:

– [Video Settings]
– [Audio Settings]
– [BD/DVD Viewing Settings] (except for the [BD Parental Control], [DVD Parental Control], [Parental Control Region Code], [Password] settings)
– [Photo Settings]
– [HDMI Settings]
– [System Settings]
– [Network Settings]
– [All Settings] (except for the [BD Parental Control], [DVD Parental Control], [Parental Control Region Code], [Password] settings)

The display asks for confirmation.

Note

• When [All Settings] is selected, all system settings other than the settings related to the password are reset, and the system turns off.
• Settings for "Adjusting pictures for videos" (page 47) are not reset.

3 **Press ←/→ to select [Start], then press ⊕.**

To cancel, select [Cancel].

Resetting all the system settings to the default

You can reset all the system settings to the default settings.

1 **Press ⊕ to select [Reset to Factory Default Settings], then press ⊕.**

2 **Press ↑/↓ to select [All Settings], then press ⊕.**

The display asks for confirmation.

3 **Press ■ and VOLUME – on the unit at the same time for more than 5 seconds.**

All system settings are reset to the default settings, and the system turns off.

Note

• Settings for "Adjusting pictures for videos" (page 47) are not reset.

Precautions

On safety

- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the system, or place the system near water, such as near a bathtub or shower room. Should any solid object or liquid fall into the cabinet, unplug the system and have it checked by qualified personnel before operating it any further.
- Do not touch the AC power cord (mains lead) with wet hands. Doing so may cause an electric shock.

On power sources

- Unplug the unit from the wall outlet (mains) if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

On placement

- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- At high volume, over long periods of time, the cabinet becomes hot to the touch. This is not a malfunction. However, touching the cabinet should be avoided. Do not place the system in a confined space where ventilation is poor as this may cause overheating.
- Do not block the ventilation slots by putting anything on the system. The system is equipped with a high power amplifier. If the ventilation slots are blocked, the system can overheat and malfunction.
- Do not place the system on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the system in a confined space, such as a bookshelf or similar unit.
- Do not install the system near heat sources such as radiators, air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the system in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the system and discs away from components with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the system.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the unit. Should this occur, the system may not operate properly. In this case, remove the disc and leave the system turned on for about half an hour until the moisture evaporates.
- When you move the system, take out any disc. If you don't, the disc may be damaged.
- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.

On adjusting volume

- Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is suddenly played.

On cleaning

- Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
 If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

On cleaning discs, disc/lens cleaners

- **Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.**

On replacement of parts

- In the events that this system is repaired, repaired parts may be collected for reuse or recycling purposes.

On your TV's color

- If the speakers should cause the TV screen to have color irregularity, turn off the TV then turn it on after 15 to 30 minutes. If color irregularity should persist, place the speakers further away from the TV set.

IMPORTANT NOTICE
Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

On moving the system

Before moving the system, make sure that there is no disc inserted, and remove the AC power cord (mains lead) from the wall outlet (mains).

About S-AIR function

- As the S-AIR function transmits sound by radio waves, heed the following:
 - Sound may skip when radio waves are obstructed. This is a characteristic of radio waves and is not malfunction.
 - Equipment that generates electromagnetic energy, such as a microwave oven, may interfere with sound transmission.
- As the S-AIR function uses the radio waves that share the same frequency as other wireless systems, such as wireless LAN or Bluetooth, interference or poor transmission may result. In this case, take the following steps:
 - Do not install the system near other wireless systems.
 - Do not use the system and the other wireless systems at the same time.
- The transmission distance differs depending on the usage environment. Find a location where transmission between the S-AIR main unit and sub unit is most effective, and install the S-AIR main unit and sub unit there.

Notes about the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

- Before playing, clean the disc with a cleaning cloth.
 Wipe the disc from the center out.



- Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

This system can only playback a standard circular disc. Using neither standard nor circular discs (e.g., card, heart, or star shape) may cause a malfunction.

Do not use a disc that has a commercially available accessory attached, such as a label or ring.

Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.
Note that if service personnel changes some parts during repair, these parts may be retained.
In the event of a problem with the S-AIR function, have a Sony dealer check the entire system together (S-AIR main unit and sub unit).

Power

Symptom	Remedy
The power is not turned on.	• Check that the AC power cord (mains lead) is connected securely. • Press I/⏻ after "STANDBY" disappears from the front panel display.
If "PROTECTOR" and "PUSH POWER" appear alternately in the front panel display.	Press I/⏻ to turn off the system, and check the following items after "STANDBY" disappears. • Are the + and – speaker cords short-circuited? • Are you using only the specified speakers? • Is anything blocking the ventilation holes of the system? • After checking the above items and fixing any problems, turn on the system. If the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

Picture

Symptom	Remedy
There is no picture.	• The video connecting cords are not connected securely. • The video connecting cords are damaged. • The unit is not connected to the correct TV input jack (page 24). • The video input on the TV is not set so that you can view pictures from the system. • Check the output method on your system (page 24). • Re-connect the connecting cord securely. • The unit is connected to an input device that is not HDCP (High-bandwidth Digital Content Protection) compliant ("HDMI" on the front panel does not light up) (page 24). • When playing a double-layer DVD, the video and audio may be momentarily interrupted at the point where the layers switch.
No picture appears when the video output resolution selected in [Output Video Format] is incorrect.	• Press and hold ► and ⏏ on the unit for more than 5 seconds to reset the video output resolution to the lowest resolution.
Video signals are not output from the jacks, other than from the HDMI OUT jack, when connecting the HDMI OUT jack and other video output jacks at the same time.	• Set [Output Video Format] to [Component Video] (page 81).
The dark area of the picture is too dark/the bright area is too bright or unnatural.	• Set [Picture Quality Mode] to [Standard] (default) (page 47).

Symptom	Remedy
The picture is not output correctly.	• Check the [Output Video Format] settings (page 81).
Picture noise appears.	• The disc is dirty or flawed. • If the picture output from your system goes through your VCR to get to your TV, the copy-protection signal applied to some BD/DVD programs could affect picture quality. If you still experience problems even when you connect your unit directly to your TV, try connecting your unit to the other input jacks.
Even though you set the aspect ratio in [TV Type] of [Video Settings], the picture does not fill the TV screen.	• The aspect ratio on the disc is fixed.
Color irregularity occurs on the TV screen.	• If the speakers are used with a CRT-based TV or projector, install the speakers at least 1.0 ft (0.3 meters) from the TV set. • If the color irregularity persists, turn off the TV set once, then turn it on after 15 to 30 minutes. • If howling occurs, reposition the speakers farther away from the TV set. • Make sure that no magnetic object (magnetic latch on a TV stand, health care device, toy, etc.) is placed near the speakers.

Sound

Symptom	Remedy
There is no sound.	• The speaker cord is not connected securely. • Press MUTING on the remote if "MUTING ON" is displayed in the front panel display. • The system is in pause mode. Press ► to return to normal play mode. • Fast forward or fast reverse is performed. Press ► to return to normal play mode. • Check the speaker settings (page 71). • Slow forward or freeze frame is performed. Press ► to return to normal play mode.
No sound is output from the HDMI OUT jack.	• The HDMI OUT jack is connected to a DVI (Digital Visual Interface) device jacks do not accept audio signals. • Try the following: ① Turn the system off and on again. ② Turn the connected component off and on again. ③ Disconnect and then connect an HDMI cable again. • Set [BD/DVD Audio Output] to [HDMI priority] (page 83).
The left and right sounds are unbalanced or reversed.	• Check that the speakers and components are connected correctly and securely.
There is no sound from the subwoofer.	• Check the speaker connections and settings (pages 22, 71).
Severe hum or noise is heard.	• Check that the speakers and components are connected securely. • Check that the connecting cords are away from a transformer or motor, and at least 10 feet (3 meters) away from your TV set or a fluorescent light. • Move your TV away from the audio components. • The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol. • Clean the disc.
The sound loses stereo effect when you play a CD.	• Select stereo sound by pressing AUDIO (page 53). • Make sure the unit is connected properly.

Symptom	Remedy
The surround effect is difficult to hear when you are playing a sound track of Dolby Digital, DTS, or MPEG audio.	• Check the decoding mode setting (page 38). • Check the speaker connections and settings (pages 22, 71). • Depending on the BD/DVD, the output signal may not be the entire 5.1 channel. It may be monaural or stereo even if the sound track is recorded in Dolby Digital or MPEG audio format.
The sound comes from the center speaker only.	• Depending on the disc, the sound may come from the center speaker only.
No sound is heard from the center speaker.	• Check the speaker connections and settings (pages 22, 71). • Check the decoding mode setting (page 38). • Depending on the source, the effect of the center speaker may be less noticeable. • A 2 channel source is being played.
No sound or only a very low-level sound is heard from the surround speakers.	• Check the speaker connections and settings (pages 22, 71). • Check the decoding mode setting (page 38). • Depending on the source, the effect of the surround speakers may be less noticeable. • Check the wireless setting (page 32). • A 2 channel source is being played.
The beginning of the sound is cut off.	• Set the sound mode to “MOVIE” or “MUSIC” (page 52). • Select “A.F.D. STD” for the decoding mode (page 38).
The sound effects are disabled.	• The effects of SOUND MODE, DYNAMIC BASS, NIGHT, “TONE,” and “DEC. MODE” may be disabled depending on the input stream (page 83).
Distortion occurs in the sound of a connected component.	• Reduce the input level for the connected component by setting [Attenuate - TV] or [Attenuate - AUDIO] (page 82).

Operation

Symptom	Remedy
Radio stations cannot be tuned in.	• Check that the antenna (aerial) is connected securely. Adjust the antenna (aerial) or connect an external antenna (aerial) if necessary. • The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning. • No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 56). • Press DISPLAY so that the frequency appears in the front panel display.
Noise is heard on AM radio.	• Check the location of the AM loop antenna (aerial) and cord (page 27).
The remote does not function.	• There are obstacles between the remote and the unit. • The distance between the remote and the unit is too far. • The remote is not pointed at the remote sensor on the unit. • The batteries in the remote are weak. • When you cannot perform menu operations via the front panel display, press HOME on the remote.

Symptom	Remedy
The disc does not play.	• The disc is dirty. • There is no disc inserted. • The disc is upside down. Insert the disc with the playback side facing down. • The disc is skewed on the disc tray. • You are attempting to play a disc with a format that cannot be played back by this system (page 101). • The region code on the BD/DVD does not match the system. • Moisture has condensed inside the unit and may cause damage to the lenses. Remove the disc and leave the unit turned on for about half an hour. • The system cannot play a recorded disc that is not correctly finalized (page 101).
File names are not displayed correctly.	• The system can only display ISO 8859-1-compliant character formats. Other character formats may be displayed differently. • Depending on the writing software used, the input characters may be displayed differently.
A disc does not start playing from the beginning.	• Resume Play has been selected. Press OPTIONS and select [Play from beginning], then press ⊕. • The title or BD/DVD menu automatically appears on the TV screen.
The system starts playing the disc automatically.	• The BD/DVD features an auto playback function.
Playback stops automatically.	• Some discs may contain an auto pause signal. While playing such a disc, the system stops playback at the auto pause signal.
You cannot perform some functions such as stop or search.	• Depending on the disc, you may not be able to perform some of the operations above. Refer to the operating instructions supplied with the disc.
Messages do not appear on the TV screen in the language you want.	• In the Setup Display, select the desired language for the on-screen display in [OSD] in [System Settings] (page 87).
The language for the soundtrack/ subtitle or angles cannot be changed.	• Try using the BD's or DVD's menu instead of the direct selection button on the remote (page 44). • Multi-lingual tracks/subtitles or multi-angles are not recorded on the BD or DVD being played. • The BD or DVD prohibits the changing of the language for the sound track/ subtitle or angles.
The disc tray does not open and you cannot remove the disc even after you press ⏏.	• Try the following: ① Press and hold VOLUME – and ⏏ on the unit for more than 5 seconds to open the disc tray. ② Remove the disc. ③ Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect after several minutes.
A disc cannot be ejected and "LOCKED" appears in the front panel display.	• Contact your Sony dealer or local authorized Sony service facility.
The system does not work normally.	• Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect after several minutes.

Symptom	Remedy
The Control for HDMI function does not work.	• When “HDMI” does not light up in the front panel display, check the HDMI connection (page 24). • Set [Control for HDMI] in [HDMI Settings] to [On] (page 86). • Make sure that the connected component is compatible with the [Control for HDMI] function. • Check that the AC power cord (mains lead) of the connected component is connected securely. • Check the connected component’s setting for the Control for HDMI function. Refer to the operating instructions supplied with the component. • If you change the HDMI connection, connect and disconnect the AC power cord (mains lead), or have a power failure, set [Control for HDMI] in [HDMI Settings] to [Off], then set [Control for HDMI] in [HDMI Settings] to [On] (page 86). • For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 67).
No sound is output from the system and TV while using the System Audio Control function.	• Make sure that the connected TV is compatible with the System Audio Control function. • For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 67).
The external memory is not recognized.	• Try the following: ① Turn the system off. ② Align the ▼ mark of the EXT slot with the ▼ mark on the external memory, and insert the external memory (USG1H only). ③ Turn the system on. ④ Check that the EXT indicator lights up in the front panel display.
Bonus contents or other data that are contained in a BD-ROM cannot be played.	• Try the following: ① Remove the disc. ② Turn the system off. ③ Remove and re-insert the external memory (page 29). ④ Turn the system on. ⑤ Check that the EXT indicator lights up in the front panel display. ⑥ Insert the BD-ROM with BonusView/BD-Live.
A message indicating that the local storage does not have enough space appears on the screen.	• Delete unnecessary data in the external memory (page 48).
The unit does not work and “CHILD LOCK” appears in the front panel display when you press any button on the unit.	• Set the child lock function to off (page 76).
The system menu does not work.	• Press HOME on the remote.

The S-AIR function

Symptom	Remedy
S-AIR connection is not established (sound transmission is not established), e.g., the indicator of the S-AIR sub unit does the following: • Turns off. • Flashes. • Turns red.	• If you use another S-AIR main unit, place it more than 26 1/4 feet (8 meters) away from the unit. • Confirm the ID of the unit and S-AIR sub unit (page 61). • You performed pairing the unit and another S-AIR sub unit. Perform pairing of the desired S-AIR sub unit (page 64). • The unit is paired to another S-AIR sub unit. To cancel pairing, reset the ID of the unit and S-AIR sub unit (page 61). • Install the S-AIR main unit and S-AIR sub unit away from other wireless products. • Stop using another wireless product. • The S-AIR sub unit is turned off. Make sure the AC power cord (mains lead) is connected and turn on the S-AIR sub unit.
No sound is heard from the S-AIR sub unit.	• If you use another S-AIR main unit, place it more than 26 1/4 feet (8 meters) away from the unit. • Confirm the ID of the unit and S-AIR sub unit (page 61). • Confirm the pairing setting (page 64). • Install the S-AIR main unit and S-AIR sub unit closer together. • Avoid use of equipment that generates electromagnetic energy, such as a microwave oven. • Install the S-AIR main unit and S-AIR sub unit away from other wireless products. • Stop using another wireless product. • Change the “RF CHANGE” setting (page 65). • Change the ID settings of the S-AIR main unit and S-AIR sub unit. • Turn off the system and S-AIR sub unit, then turn on them.
There is noise or the sound skips.	• If you use another S-AIR main unit, place it more than 26 1/4 feet (8 meters) away from the unit. • Install the S-AIR main unit and S-AIR sub unit closer together. • Avoid use of equipment that generates electromagnetic energy, such as a microwave oven. • Install the S-AIR main unit and S-AIR sub unit away from other wireless products. • Stop using another wireless product. • Change the “RF CHANGE” setting (page 65). • Change the ID settings of the S-AIR main unit and S-AIR sub unit.

Surround amplifier operation

If no sound is output from the surround speakers, check the status of the POWER / ON LINE indicator on the surround amplifier. For details of the POWER / ON LINE indicator, see “Step 3: Setting up the Wireless System” (page 32).

Symptom	Remedy
The power is not turned on.	• Check that the AC power cord (mains lead) is connected securely.
The POWER / ON LINE indicator does not turn on.	Turn off the surround amplifier and remove the AC power cord (mains lead) of the surround amplifier, then check the following items. • Are the + and – speaker cords short-circuited? • Is anything blocking the ventilation holes of the surround amplifier? After checking the above items and fixing any problems, connect the AC power cord (mains lead) of the surround amplifier and turn on the surround amplifier. If the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.
There is no sound. Check the status of the POWER / ON LINE indicator on the surround amplifier.	• turns green – Check the speaker connections and settings. – The volume of the unit is set to minimum. – The unit is in muting status. – Depending on the source or the settings of the unit, the effect of the speakers may be less noticeable. – Headphones are connected. • flashes green – The unit is not turned on. – You performed pairing the unit and another S-AIR sub unit. – The surround amplifier is paired to another S-AIR main unit. – Confirm the IDs of the unit and surround amplifier (page 61). – Pairing operation is not completed. – Sound transmission is poor. Move the surround amplifier so that the POWER / ON LINE indicator turns green. – Install the unit and surround amplifier apart from another wireless product. – Stop using another wireless product. – The wireless transceiver(s) is/are not inserted correctly. • turns red – Change the SURROUND SELECTOR switch (SURROUND or SURROUND BACK) of the surround amplifier to match the unit.
“HP NO LINK” and “VOLUME MIN” appear alternately in the front panel display, and the volume of the unit becomes minimum.	• Volume becomes the minimum when you turn off the surround amplifier with headphones connected before you turn off the unit or if radio reception is poor. In these cases, check radio reception, and set the volume again.

Self-diagnosis Function

When the self-diagnosis function is activated to prevent the system from malfunctioning, an error code appears in the front panel display, or just ⚠ appears without any messages on the entire screen. In these cases, check the following.

When an error code appears in the front panel display

Error code	Corrective action
Exxxx	Contact your nearest Sony dealer or local authorized Sony service facility and give the error code.
SYSTEM ERR UPDATE NG	Turn off the system and disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect and turn the system on. If the system does not work normally, consult your nearest Sony dealer or local authorized Sony service facility.

When just ⚠ appears without any messages on the entire screen

Contact your nearest Sony dealer or local authorized Sony service facility.

Playable Discs

Type	Disc logo	Characteristics	Icon
Blu-ray Disc		BD-ROMs and BD-REs/BD-Rs in BDMV and BDAV mode, including 8 cm discs (single layer) and DL discs	BD
DVD VIDEO		Discs such as movies that can be purchased or rented	DVD
DVD/DATA DVD	    	DVD+RWs/DVD+Rs in +VR mode or DVD-RWs/DVD-Rs in video and VR mode, including 8 cm discs (single layer) and DVD+R DL/ DVD-R DL discs	DVD
		DVD+RWs/DVD+Rs/DVD-RWs/ DVD-Rs containing JPEG* image files	DATA DVD
AVCHD		Discs recorded in AVCHD format**	DVD
CD		Music CDs or CD-Rs/CD-RWs in music CD format	CD
DATA CD	–	CD-Rs/CD-RWs containing JPEG image files	DATA-CD

* JPEG format conforming to UDF (Universal Disk Format).

** Some AVCHD format discs may not play, depending on the recording condition. The AVCHD format disc will not play if it has not been correctly finalized.

Notes about BD-ROM compatibility

Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version.
The audio output differs depending on the source, connected output jack, and selected audio settings.

Discs that cannot be played

- BDs with cartridge
- DVD-RAMs
- HD DVDs
- DVD Audio discs
- PHOTO CDs
- Data part of CD-Extras
- VCDs/Super VCDs
- HD layer on Super Audio CDs
- BD-ROMs/DVD VIDEOs with a different region code (page 102).

- A disc recorded in a color system other than NTSC, such as PAL (this system conforms to the NTSC color system).

Note on playback operations of a BD/DVD

Some playback operations of a BD/DVD may be intentionally set by software producers. Since this system plays a BD/DVD according to the disc contents the software producers designed, some playback features may not be available. Refer to the instructions supplied with the BD/DVD.

Region code (BD-ROM/DVD VIDEO only)

Your system has a region code printed on the rear of the unit and will only play a BD-ROM/DVD VIDEO (playback only) labeled with identical region codes. This system is used to protect copyrights. DVD VIDEO labeled  will also play on this system.
If you try to play any other DVD VIDEO, the message [Playback prohibited by region code.] will appear on the TV screen. Depending on the BD-ROM/DVD VIDEO, no region code may be indicated even though playing the BD-ROM/DVD VIDEO is prohibited by area restrictions.

Notes about BD-REs/BD-Rs, DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs, or CD-Rs/CD-RWs

Some BD-REs/BD-Rs, DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs, or CD-Rs/CD-RWs cannot be played on this system due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software. The BD-Rs recorded on a PC cannot be played if postscripts are recordable.
A CD or DVD disc will not play if it has not been correctly finalized. For more information, refer to the operating instructions supplied with the recording device. Note that some playback functions may not work with some DVD+RWs/DVD+Rs, even if they have been correctly finalized. In this case, view the disc using normal playback.

Notes on discs

This product is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some of the music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be playable by this product.

Note about double-layer DVDs

The playback pictures and sound may be momentarily interrupted when the layers switch.

Note about 8 cm BD-REs/8 cm BD-Rs

Some 8 cm BD-REs/8 cm BD-Rs cannot be played on this system.

Note about BD-REs/BD-Rs

This system supports Ver. 2.1 BD-RE and Ver. 1.1 and 1.2 BD-R including organic pigment type BD-R (LTH type).

Supported Audio Formats

Audio formats supported by this system are as follows.

Function	Format							
	LPCM 2ch	LPCM 5.1ch, LPCM 7.1ch	Dolby Digital	Dolby TrueHD, Dolby Digital Plus	DTS	DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS96/24	DTS-HD High Resolution Audio	DTS-HD Master Audio
"BD/DVD"	○	○	○	○	○	○*	○	○
"SAT/CABLE" "TV" (DIGITAL IN)	○	–	○	–	○	–	–	–

○: Supported format.

–: Unsupported format.

* BD only.

Note

• The table above is valid only when you set [BD Audio Setting] to [Direct] (page 82) and [Sound Effect] to [Off] (page 83). If another setting is used, depending on the audio format, sound may be decoded to a suitable format automatically.

Video Output Resolution

Output resolution differs depending on the [Output Video Format] setting in [Video Settings] (page 80).

Resolution setting	When [Output Video Format] is set to [HDMI]			When [Output Video Format] is set to [Component Video]		
	VIDEO OUT jack	COMPONENT VIDEO OUT jack	HDMI OUT jack	VIDEO OUT jack	COMPONENT VIDEO OUT jacks	HDMI OUT jack
480i	480i	480i	480i	480i	480i	480i
480p	480i	480i	480p	480i	480p	480p
720p	480i	480i	720p	480i	720p*	720p*
1080i	480i	480i	1080i	480i	1080i*	1080i*
1080p	no picture	no picture	1080p	unselectable	unselectable	unselectable

* Protected contents on DVDs are output at 480p resolution.

When [Output Video Format] is set to [Video]

480i video signals are output from the VIDEO OUT or COMPONENT VIDEO OUT jack, and 480p video signals are output from the HDMI OUT jack.

About the video output resolution of the DIGITAL MEDIA PORT adapter

480i video signals are output from the VIDEO OUT jack regardless of the resolution setting, and video signals are not output from the HDMI OUT and COMPONENT VIDEO OUT jacks when playing contents via the DIGITAL MEDIA PORT adapter.

Specifications

Amplifier Section (BDV-T20W)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
(FTC Output Power)
for the US model

Front L/Front R:	With 3 ohms loads, both channels driven, from 180 - 20,000 Hz; rated 56 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 milli watts to rated output.
Surround mode (reference)	RMS output power Front L/Front R/Center*: 142 watts (per channel at 3 ohms, 1 kHz, 10% THD) Subwoofer*: 140 watts (at 1.5 ohms, 80 Hz, 10% THD)

* *Depending on the decoding mode settings and the source, there may be no sound output.*

Amplifier Section (BDV-E500W)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
(FTC Output Power)
for the US model

Front L/Front R:	With 3 ohms loads, both channels driven, from 180 - 20,000 Hz; rated 56 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 milli watts to rated output.
U.S. models:	
Surround mode (reference)	RMS output power Front L/Front R/Center*: 143 watts (per channel at 3 ohms, 1 kHz, 10% THD) Subwoofer*: 285 watts (at 1.5 ohms, 80 Hz, 10% THD)
Other models:	
Stereo mode (rated)	108 W + 108 W (at 3 ohms, 1 kHz, 1% THD)
Surround mode (reference)	RMS output power Front L/Front R/Center*: 143 watts (per channel at 3 ohms, 1 kHz, 10% THD) Subwoofer*: 285 watts (at 1.5 ohms, 80 Hz, 10% THD)

* *Depending on the decoding mode settings and the source, there may be no sound output.*

Inputs (Analog)	
TV (AUDIO IN)	Sensitivity: 450/250 mV Impedance: 50 kilohms
AUDIO (AUDIO IN)	Sensitivity: 450/250 mV Impedance: 50 kilohms
Inputs (Digital)	
TV (OPTICAL)	Impedance: -
SAT/CABLE (COAXIAL)	Impedance: 75 ohms

Video Section

Outputs	VIDEO: 1 Vp-p 75 ohms COMPONENT: Y: 1 Vp-p 75 ohms P_B/C_B, P_R/C_R: 0.7 Vp-p 75 ohms HDMI OUT: Type A (19 pin)

BD/DVD/CD System

Signal format system	NTSC

Tuner Section

System	PLL quartz-locked digital synthesizer
FM tuner section	
Tuning range	87.5 MHz - 108.0 MHz (100 kHz step)
Antenna (aerial)	FM wire antenna (aerial)
Antenna (aerial) terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 kHz - 1,710 kHz (with the interval set at 10 kHz) 531 kHz - 1,710 kHz (with the interval set at 9 kHz)
Antenna (aerial)	AM loop antenna (aerial)
Intermediate frequency	450 kHz

Speakers (BDV-T20W)

Front (SS-TSB94)

Speaker system	Full range Bass reflex
Speaker unit	65 mm (2 5/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	113 mm × 830 mm × 83 mm (4 1/2 in × 32 3/4 in × 3 3/8 in) (w/h/d) (without stand) 315 mm × 1,015 mm - 1,345 mm × 315 mm (12 1/2 in × 40 in - 53 in × 12 1/2 in) (w/h/d) (with stand)
Mass (approx.)	1.6 kg (3 lb 9 oz) (without stand) 3.3 kg (7 lb 5 oz) (with stand)

Center (SS-CTB92)

Speaker system	Full range, Magnetically Shielded
Speaker unit	30 mm × 60 mm (1 3/16 in × 2 3/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	380 mm × 50 mm × 64 mm (15 in × 2 in × 2 5/8 in) (w/h/d)
Mass (approx.)	0.38 kg (14 oz)

Surround (SS-TSB95)

Speaker system	Full range Bass reflex
Speaker unit	65 mm (2 5/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	102 mm × 163 mm × 77 mm (4 1/8 in × 6 1/2 in × 3 1/8 in) (w/h/d)
Mass (approx.)	0.52 kg (1 lb 3 oz)

Subwoofer (SS-WSB92)

Speaker system	Subwoofer Bass reflex
Speaker unit	160 mm (6 3/8 in) cone type
Rated impedance	1.5 ohms
Dimensions (approx.)	220 mm × 395 mm × 325 mm (8 3/4 in × 15 5/8 in × 12 7/8 in) (w/h/d)
Mass (approx.)	5.6 kg (12 lb 6 oz)

Speakers (BDV-E500W)

Front (SS-TSB91)

Speaker system	2-Way 2-Driver, Bass reflex
Speaker unit	Tweeter: 20 mm (13/16 in) cone type Woofer: 65 mm (2 5/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	115 mm × 640 mm × 85 mm (4 5/8 in × 25 1/4 in × 3 3/8 in) (w/h/d) (wall-mounted part) 295 mm × 1,190 mm × 295 mm (11 5/8 in × 46 7/8 in × 11 5/8 in) (w/h/d) (whole speaker)
Mass (approx.)	1.5 kg (3 lb 5 oz) (wall-mounted part) 3.7 kg (8 lb 3 oz) (whole speaker)

Center (SS-CTB91)

Speaker system	Full range, Magnetically Shielded
Speaker unit	30 mm × 60 mm (1 3/16 in × 2 3/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	380 mm × 51 mm × 68 mm (15 in × 2 1/8 in × 2 3/4 in) (w/h/d)
Mass (approx.)	0.4 kg (15 oz)

Surround (SS-TSB92)

Speaker system	Full range Bass reflex
Speaker unit	65 mm (2 5/8 in) cone type
Rated impedance	3 ohms
Dimensions (approx.)	105 mm × 225 mm × 85 mm (4 1/4 in × 8 7/8 in × 3 3/8 in) (w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Subwoofer (SS-WSB91)

Speaker system	Subwoofer Bass reflex
Speaker unit	180 mm (7 1/8 in) cone type
Rated impedance	1.5 ohms
Dimensions (approx.)	225 mm × 395 mm × 325 mm (8 7/8 in × 15 5/8 in × 12 7/8 in) (w/h/d)
Mass (approx.)	6.2 kg (13 lb 11 oz)

General

Power requirements	120 V AC, 60 Hz
Power consumption	On: 120 W Standby: 0.3 W (at the Power Saving mode)
Output voltage/current (DIGITAL MEDIA PORT)	DC 5 V/700 mA
LAN (100)	100BASE-TX Terminal
EXT	External memory slot (For connecting the external memory) DC output: 5 V 500 mA Max
Dimensions (approx.)	430 mm × 93 mm × 400 mm (17 in × 3 3/4 in × 15 3/4 in) (w/h/d) incl. projecting parts 430 mm × 93 mm × 430 mm (17 in × 3 3/4 in × 17 in) (w/h/d) (incl. Wireless transceiver)
Mass (approx.)	5.4 kg (11 lb 15 oz)

Surround amplifier (TA-SA100WR)

Amplifier Section (BDV-T20W)
AUDIO POWER SPECIFICATIONS
for the US model
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

	With 3 ohms loads, both channels driven, from 180 - 20,000 Hz; rated 50 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 milli watts to rated output.
Surround mode (reference)	RMS output power 142 W (per channel at 3 ohms, 1 kHz, 10% THD)*

* *Depending on the source, there may be no sound output.*

Amplifier Section (BDV-E500W)
AUDIO POWER SPECIFICATIONS
for the US model
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

	With 3 ohms loads, both channels driven, from 180 - 20,000 Hz; rated 50 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 milli watts to rated output.

U.S. models:

Surround mode (reference)	RMS output power 143 W (per channel at 3 ohms, 1 kHz, 10% THD)*

Other models:

Stereo mode (rated)	80 W + 80 W (at 3 ohms, 1 kHz, 1% THD)
Surround mode (reference)	RMS output power 143 W (per channel at 3 ohms, 1 kHz, 10% THD)*

* *Depending on the source, there may be no sound output.*

Rated impedance	3 - 16 Ω

General

Power requirements	120 V AC, 60 Hz
Power consumption	On: 50 W
Dimensions (approx.)	85 mm × 100 mm × 330 mm (3 3/8 in × 4 in × 13 in) (w/h/d) (incl. Wireless transceiver) 85 mm × 100 mm × 345 mm (3 3/8 in × 4 in × 13 5/8 in) (w/h/d) incl. speaker cord cover and speaker cord holder
Mass (approx.)	1.7 kg (3 lb 12 oz) incl. speaker cord cover and speaker cord holder

Wireless transceiver (EZW-RT10/EZW-RT10A)

Communication system	S-AIR Specification version 1.0
Frequency band	2.4000 GHz - 2.4835 GHz
Modulation method	DSSS
Power requirements	DC 3.3 V, 350 mA
Dimensions (approx.)	50 mm × 13 mm × 60 mm (2 in × 17/32 in × 2 3/8 in) (w/h/d)
Mass (approx.)	24 g (1 oz)

Design and specifications are subject to change without notice.

- Standby power consumption 0.3 W.
- Halogenated flame retardants are not used in the certain printed wiring boards.
- Over 85% power efficiency of amplifier block is achieved with the full digital amplifier, S-Master.

Language Code List

The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1183	Irish	1347	Maori	1507	Samoan
1028	Abkhazian	1186	Scots Gaelic	1349	Macedonian	1508	Shona
1032	Afrikaans	1194	Galician	1350	Malayalam	1509	Somali
1039	Amharic	1196	Guarani	1352	Mongolian	1511	Albanian
1044	Arabic	1203	Gujarati	1353	Moldavian	1512	Serbian
1045	Assamese	1209	Hausa	1356	Marathi	1513	Siswati
1051	Aymara	1217	Hindi	1357	Malay	1514	Sesotho
1052	Azerbaijani	1226	Croatian	1358	Maltese	1515	Sundanese
1053	Bashkir	1229	Hungarian	1363	Burmese	1516	Swedish
1057	Byelorussian	1233	Armenian	1365	Nauru	1517	Swahili
1059	Bulgarian	1235	Interlingua	1369	Nepali	1521	Tamil
1060	Bihari	1239	Interlingue	1376	Dutch	1525	Telugu
1061	Bislama	1245	Inupiak	1379	Norwegian	1527	Tajik
1066	Bengali; Bangla	1248	Indonesian	1393	Occitan	1528	Thai
		1253	Icelandic	1403	(Afan)Oromo	1529	Tigrinya
1067	Tibetan	1254	Italian	1408	Oriya	1531	Turkmen
1070	Breton	1257	Hebrew	1417	Punjabi	1532	Tagalog
1079	Catalan	1261	Japanese	1428	Polish	1534	Setswana
1093	Corsican	1269	Yiddish	1435	Pashto; Pushto	1535	Tonga
1097	Czech	1283	Javanese			1538	Turkish
1103	Welsh	1287	Georgian	1436	Portuguese	1539	Tsonga
1105	Danish	1297	Kazakh	1463	Quechua	1540	Tatar
1109	German	1298	Greenlandic	1481	Rhaeto-Romance	1543	Twi
1130	Bhutani	1299	Cambodian			1557	Ukrainian
1142	Greek	1300	Kannada	1482	Kirundi	1564	Urdu
1144	English	1301	Korean	1483	Romanian	1572	Uzbek
1145	Esperanto	1305	Kashmiri	1489	Russian	1581	Vietnamese
1149	Spanish	1307	Kurdish	1491	Kinyarwanda	1587	Volapük
1150	Estonian	1311	Kirghiz	1495	Sanskrit	1613	Wolof
1151	Basque	1313	Latin	1498	Sindhi	1632	Xhosa
1157	Persian	1326	Lingala	1501	Sangho	1665	Yoruba
1165	Finnish	1327	Laothian	1502	Serbo-Croatian	1684	Chinese
1166	Fiji	1332	Lithuanian			1697	Zulu
1171	Faroese	1334	Latvian; Lettish	1503	Singhalese		
1174	French			1505	Slovak		
1181	Frisian	1345	Malagasy	1506	Slovenian	1703	Not specified

Parental Control/Area Code List

Code	Area	Code	Area	Code	Area	Code	Area
2044	Argentina	2165	Finland	2362	Mexico	2149	Spain
2047	Australia	2174	France	2376	Netherlands	2499	Sweden
2046	Austria	2109	Germany	2390	New Zealand	2086	Switzerland
2057	Belgium	2248	India	2379	Norway	2528	Thailand
2070	Brazil	2238	Indonesia	2427	Pakistan	2184	United Kingdom
2079	Canada	2254	Italy	2424	Philippines		
2090	Chile	2276	Japan	2436	Portugal		
2092	China	2304	Korea	2489	Russia		
2115	Denmark	2363	Malaysia	2501	Singapore		

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Package List

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pump
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busybox
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Glossary

AVCHD

The AVCHD format is a high-definition digital video camera format used to record SD (standard definition) or HD (high definition) signals of either the 1080i specification* or the 720p specification** on DVDs, using efficient data compression coding technology. The MPEG-4 AVC/H.264 format is adopted to compress video data, and the Dolby Digital or Linear PCM system is used to compress audio data. The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compression format. The MPEG-4 AVC/H.264 format enables a high definition (HD) video signal shot on a digital video camera recorder to be recorded on DVD discs in the same way as it would be for a standard definition (SD) television signal.

* A high definition specification that utilizes 1080 effective scanning lines and the interlace format.

** A high definition specification that utilizes 720 effective scanning lines and the progressive format.

BD-J application

The BD-ROM format supports Java for interactive functions.
"BD-J" offers content providers almost unlimited functionality when creating interactive BD-ROM titles.

BD-R

BD-R (Blu-ray Disc Recordable) is a recordable, write-once Blu-ray Disc, available in the same capacities as the BD below. Since contents can be recorded and cannot be overwritten, a BD-R can be used to archive valuable data or storing and distributing video material.

BD-RE

BD-RE (Blu-ray Disc Rewritable) is a recordable and rewritable Blu-ray Disc, available in the same capacities as the BD below. The re-recordable feature makes extensive editing and time-shifting applications possible.

BD-ROM

BD-ROMs (Blu-ray Disc Read-Only Memory) are commercially produced discs and are available in the same capacities as the BD below. Other than conventional movie and video contents, these discs have enhanced features such as interactive content, menu operations using pop-up menus, selection of subtitle display, and slideshow. Although a BD-ROM may contain any form of data, most BD-ROM discs will contain movies in High Definition format, for playback on Blu-ray Disc/DVD players.

Blu-ray Disc (BD)

A disc format developed for recording/playing high-definition (HD) video (for HDTV, etc.), and for storing large amounts of data. A single layer Blu-ray Disc holds up to 25 GB, and a dual-layer Blu-ray Disc holds up to 50 GB of data.

DCS (Digital Cinema Sound)

In collaboration with Sony Pictures Entertainment, Sony measured the sound environment of their studios and integrated the data of the measurement with Sony DSP (Digital Signal Processor) technology to develop "Digital Cinema Sound." "Digital Cinema Sound" simulates in a home theater an ideal movie theater sound environment based on the preference of the movie director.

Digital Cinema Auto Calibration

Digital Cinema Auto Calibration was developed by Sony to automatically measure and adjusts the speaker settings to your listening environment in a short period of time.

Dolby Digital

This movie theater sound format is more advanced than Dolby Surround Pro Logic. In this format, the surround speakers output stereo sound with an expanded frequency range, and a subwoofer channel for deep bass is independently provided. This format is also called "5.1" with the subwoofer channel designed as the 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately for superior channel separation. Furthermore,

since all the signals are processed digitally, less signal degradation occurs.

Dolby Digital Plus

Developed as an extension to Dolby Digital, the audio coding technology supports 7.1 multi-channel surround sound.

Dolby Pro Logic II

Dolby Pro Logic II creates five full-bandwidth output channels from 2 channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

■ Movie mode

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced sound field directionality that approaches the quality of discrete 5.1-channel sound.

■ Music mode

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

Dolby Surround Pro Logic

As one method of decoding Dolby Surround, Dolby Surround Pro Logic produces four channels from 2 channel sound. Compared with the former Dolby Surround system, Dolby Surround Pro Logic reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Surround Pro Logic, you should have one pair of surround speakers and a center speaker. The surround speakers output monaural sound.

Dolby TrueHD

Dolby TrueHD is a lossless coding technology that supports up to 8 channels of multi-channel surround sound for the next generation optical discs. The reproduced sound is true to the original source bit-for-bit.

DTS

Digital audio compression technology developed by DTS, Inc. This technology conforms to 5.1-channel surround. This format comprises of stereo rear channel and there is discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized due to the all channel data being recorded discretely and processed in digitally.

DTS-HD High Resolution Audio

Developed as an extension to DTS Digital Surround format. It supports a maximum sampling frequency of 96 kHz, and 7.1 multi-channel surround.
DTS-HD High Resolution Audio has a maximum transmission rate of 6 Mbps, with lossy compression (Lossy).

DTS-HD Master Audio

DTS-HD Master Audio has a maximum transmission rate of 24.5 Mbps, and uses lossless compression (Lossless), and DTS-HD Master Audio corresponds to a maximum sampling frequency of 192 kHz, and maximum of 7.1ch.

HDMI (High-Definition Multimedia Interface)

HDMI is an interface that supports both video and audio on a single digital connection, allowing you to enjoy high quality digital picture and sound. The HDMI specification supports HDCP (High-bandwidth Digital Content Protection), a copy protection technology that incorporates coding technology for digital video signals.

Interlace format (Interlaced scanning)

The Interlace format is the NTSC standard method for displaying TV images at 30 frames per second. Each frame is scanned twice - alternately between the even numbered scanning lines and then odd numbered scanning lines, at 60 times per second.

LTH (Low to High)

LTH is a recording system that supports organic pigment type BD-R.

Parental Control

A function of the BD/DVD to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

PhotoTV HD

"PhotoTV HD" allows for a highly-detailed pictures, and photo-like expression of subtle textures and colors. By connecting Sony "PhotoTV HD" compatible devices using an HDMI cable, whole new world of photos can be enjoyed in breathtaking Full HD quality. For instance, the delicate texture of the human skin, flowers, sand and waves can now be displayed on a large screen in beautiful photo-like quality.

Pop-up menu

An enhanced menu operation available on BD-ROMs. The pop-up menu appears when POP UP/MENU is pressed during playback, and can be operated while playback is in progress.

Progressive format (sequential scanning)

In contrast to the Interlace format, the progressive format can reproduce 50 - 60 frames per second by reproducing all scanning lines (525 lines for the NTSC system). The overall picture quality increases and still images, text and horizontal lines appear sharper. This format is compatible with the 525 or 625 progressive format.

S-AIR (Sony Audio Interactive Radio frequency)

Recent times have seen the rapid spread of BD/DVD media, Digital Broadcasting, and other high-quality media.
To ensure that the subtle nuances of these high-quality media are transmitted with no deterioration, Sony has developed a technology called "S-AIR" for the radio transmission of digital audio signals with no compression, and has incorporated this technology into the EZW-RT10/EZW-RT10A/EZW-T100.
This technology transfers digital audio signals with no compression using the 2.4 GHz band range of ISM band (Industrial, Scientific, and Medical band), such as wireless LANs and Bluetooth applications.

x.v.Color

x.v.Color is a familiar term for the xvYCC standard proposed by Sony.
xvYCC is an international standard for Color space in video.
This standard can express a wider color range than the currently used broadcast standard.

24p True Cinema

Movies shot with a film camera consist of 24 frames per second.
Since conventional televisions (both CRT and flat panels) display frames either at 1/60 or 1/50 second intervals, the 24 frames do not appear at an even pace.
When connected to a TV with 24p capabilities, the player displays each frame at 1/24 second intervals — the same interval originally shot with the film camera, thus faithfully reproducing the original cinema image.

Index

Numerics

24p True Cinema 122

A

A/V SYNC 47
ANGLE 43
Attenuate - AUDIO 83
Attenuate - TV 82
Audio 84
Audio DRC 82
Audio Settings 82
Auto Calibration 70, 83
Auto Display 87
AVCHD 101, 120

B

BD Audio Setting 82
BD Data 48
BD Internet Connection 85
BD Parental Control 84
BD/DVD Menu 84
BD/DVD Viewing Settings 84
BDAV 101
BD-Live 48
BDMV 101
BD-R 120
BD-RE 120
Blu-ray Disc 120

C

CD 49, 101
Child Lock 76
Cinema Conversion Mode 81
Control for HDMI 43, 67, 86

D

D. C. A. C. (Digital Cinema Auto Calibration) 70, 120
DEMO 76
DIGITAL MEDIA PORT 60
DIMMER 75
Disc Lock 42
Dolby Digital 53, 120
Dolby Digital Plus 121
Dolby Pro Logic II 121
Dolby Surround Pro Logic 121
Dolby TrueHD 121
DTS 53, 121
DTS-HD 121
DVD 41, 101
DVD Aspect Ratio 80
DVD Parental Control 84
DYNAMIC BASS 54

E

Easy Setup 34, 89

F

FM MODE 56
Front panel 12
Front panel display 13

H

HDMI
 YCbCr/RGB (HDMI) 82
HDMI (High-Definition Multimedia Interface) 121
HDMI Settings 86
Hybrid Disc Playback Layer 85

I

Instant Advance 42
Instant Replay 42
Interlace format 121
Internet Settings 88

L

Language Code List 108
LTH 121

M

Multiplex broadcast sound 54

N

NAME IN 59
Network Settings 88
Network Update 79
NIGHT 55

O

One-Touch Play 43
OPTIONS 51
OSD 87
Output Video Format 81

P

PAIRING 64
PARENTAL CONTROL 122
Parental Control 42
Parental Control Region Code 85
Password 85
Pause Mode 82
Photo Settings 86
PhotoTV HD 51, 122
Playable discs 101
POP UP/MENU 44
Progressive format 122

R

Rear panel 14
Region code 102
Remote 9
Resetting 90
Resume Play 44
RF CHANGE 65

S

S-AIR 5, 61, 122
 S-AIR ID 61
 S-AIR receiver 61
S-AIR INFO 65
S-AIR MODE 62
S-AIR STBY 63
Screen Format 80
Screen Saver 87
SLEEP MENU 75
Slideshow Speed 86
Sound Effect 83
Speaker Settings 71, 83
 Connection 71
 Distance 72
 Level 72
Standby Mode 87
Subtitle 84
Surround amplifier 15, 61
System Information 87
SYSTEM MENU 38, 47, 55, 62, 63, 64, 65, 75, 76

T

Test Tone 72
TONE 55
TV Type 80

U

Update 79

V

Video Settings 80

X

x.v.Color 82, 122